APPENDIX H
HAZARDOUS MATERIALS REPORT

File 1: Final Technical Report

Appendix A:	EDR Radius Report
Appendix B:	Location Maps for All Section 5 Potential Hazardous Waste Sites
Appendix C:	Section 5 Alternatives 4, 5, 6, 7, 8 and Refined Preferred Alternative 8 Maps
Appendix D:	INDOT Hazardous Waste Site Assessment Forms, Site Maps and Photologs for Sites Carried Forward for Detailed Analysis

Table of Contents

Appendices

This page is intentionally blank

1 Methodology

1.1 Tier 1 Studies

The Geographic Information System (GIS) shapefiles of the Indiana Department of Environmental Management (IDEM) were reviewed within the proposed I-69 corridor during the Tier 1 I-69 Studies to determine the presence of potentially hazardous material waste sites within the I-69 Tier 1 Study Corridor. These files are available to download on the Indiana Map web site at http://inmap.indiana.edu/dload_page/environment.html.

The IDEM Office of Land Quality has provided updated versions of their layers that are current to March 2013; these files include:

- Commissioner Bulletin Sites
- Composting Facilities
- Confined Animal Feeding Operations
- Construction-Demolition Waste sites
- Corrective Action (RCRA) Sites
- LUST Sites
- Open Dumps
- Superfund Sites
- UST Sites
- VRP Sites
- Industrial Waste Sites
- Restricted Waste Sites
- Septage Waste Sites
- Solid Waste Sites
- TSD (RCRA) Sites
- TRI Database
- Brownfield Site Database

1.2 Tier 2 Studies

This methodology describes the activities that were carried out at each stage of the Section 5 Tier 2 study process. It is organized into three parts:

- Activities completed for entire Section 5 corridor.
- Activities completed for alternatives carried forward for detailed analysis.
- Activities completed for preferred alternative.

1.2.1 Activities Completed for the Entire Section 5 Corridor

Basic information regarding the locations and types of hazardous waste sites was gathered throughout the Section 5 corridor as part of the Preferred Alternative 3C that was selected in the Tier 1 ROD. The Section 5 study corridor begins at SR 37, south of Bloomington, and traverses north on the existing SR 37 alignment for approximately 21 miles to its northern terminus, south of SR 39 near Martinsville. The approved corridor is generally 2,000 feet wide, but is narrower in some areas and broader in others (**Figure 1-1**). Data collected through these efforts and presented in this report will be summarized in the Final Environmental Impact Statement (FEIS).

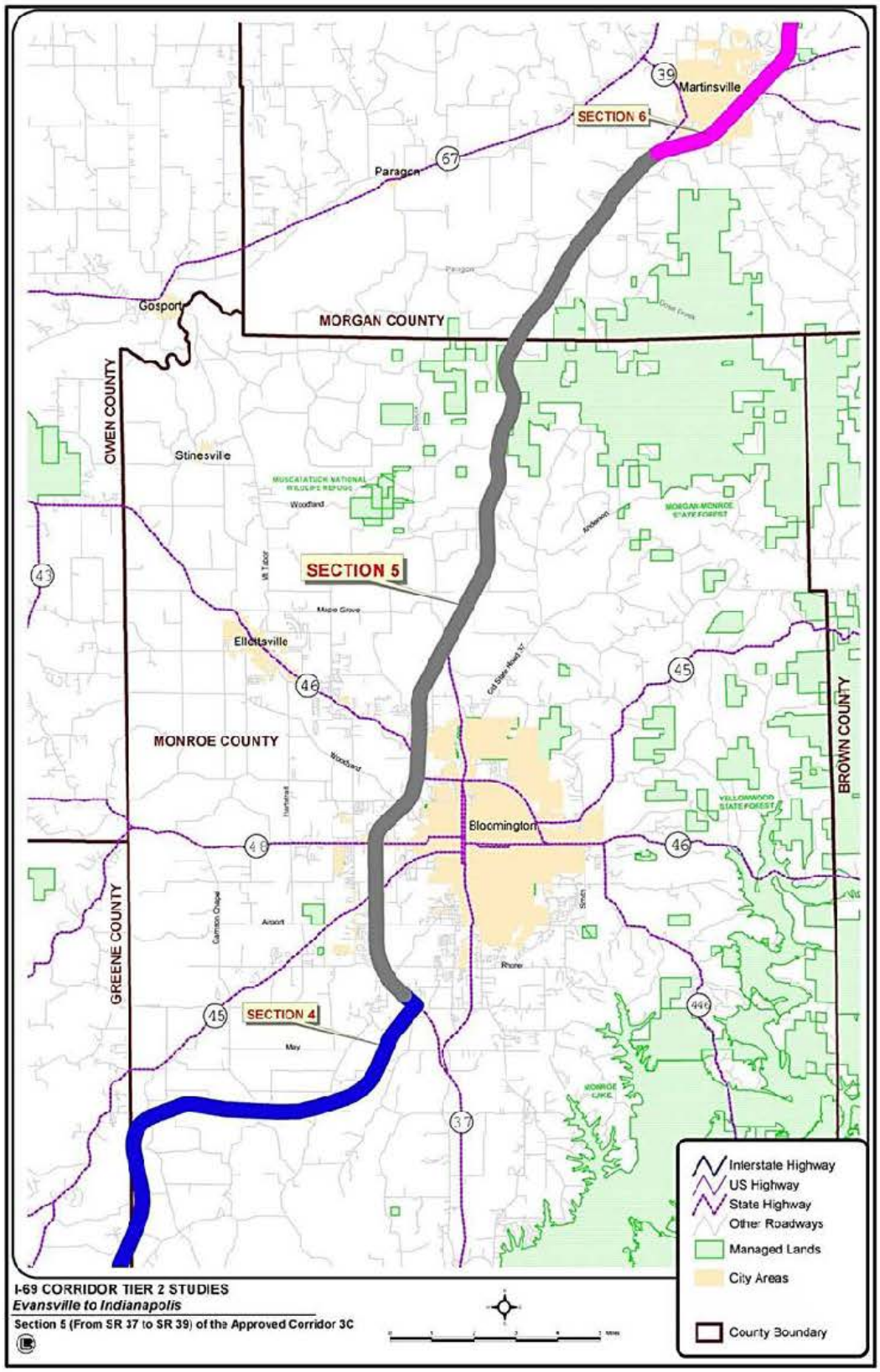

Figure 1-1: Tier 2, Section 5 Study Corridor

The following steps were taken through March 2013:

- IDEM data sets provided in the shapefiles were verified as current and new data was obtained from IDEM as necessary to reasonably update the files.

  A detailed review of the IDEM site files in 2005 and the IDEM Virtual File Cabinet http://www.in.gov/idem/4101.htm files in 2012 was performed for sites identified in the database that were either located within the Section 5 corridor or located within the American Society of Testing and Materials (ASTM) Standard practice search radius that intersected the corridor. Data from the United States Environmental Protection Agency (USEPA), public health departments, local emergency management agencies (EMA), local emergency planning committees (LEPC) and other sources, as appropriate, were also reviewed if there were any known hazardous waste sites located within the Section 5 corridor or the ASTM search radius.

- An environmental database report was obtained from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The EDR Report provides a search of federal and state records for sites within search distances from the 2,000-foot Section 5 corridor as specified in ASTM Standard E-1527-05. The report provides a list of sites identified in the records searched, maps showing the locations of these sites in relation to the corridor, and detailed site reports of National Priority List (NPL) Superfund sites identified in the search radii. A copy of the EDR Radius Map Report for Section 5 is provided in **Appendix A**.

- Windshield field surveys were conducted within the Section 5 corridor in order to identify any other potential hazardous waste sites that might affect a proposed alignment(s) as supplemental to the GIS shapefiles and the EDR report.

- Review of numerous USEPA documents for the Lemon Lane Landfill and Superfund sites available at the IDEM, IDEM VFC, Indiana University Geology Library, and Monroe County Library were conducted and summaries made from the 2010 Lemon Lane Landfill and 2012 Bennett's Dump Five-Year Review Reports.

- In March 2013, IDEM supplied tables and map locations of sites identified by various IDEM section representatives in the vicinity of the 2,000-foot Section 5 corridor. This information was also reviewed and incorporated into the GIS data set. Meetings with the USEPA and IDEM have been conducted and coordination will continue for specific sites of concern.

The locations of the hazardous waste site boundaries within the Section 5 corridor were considered during the initial development of alternatives and in the screening of alternatives (especially the avoidance of impacts to the USEPA Superfund sites). This information helped to ensure that hazardous waste avoidance and minimization was "built in" to the alternatives as they were developed and evaluated.

1.2.2 Activities Completed for Alternatives Carried Forward for Detailed Analysis

The alternative screening process resulted in the selection of six alternatives carried forward for detailed analysis in the Section 5 DEIS and FEIS. Additional analyses were completed for all hazardous waste sites located within the rights-of-way of the alternatives carried forward for detailed analysis. Potential impacts upon hazardous waste sites were determined per the right-of-way and development of Alternatives 4, 5, 6, 7, the DEIS Preferred Alternative 8 (referred to as Alternative 8 for the remainder of this document), and Refined Preferred Alternative 8 based upon conceptual design criteria.

After the determination of the proposed alignment(s) in the project corridor, the owners of each potential hazardous waste site within the proposed alignments were contacted, and site visits were conducted (when possible) to discuss the history of the property. Field inspections of each potential hazardous waste site were conducted in 2006 and updated in 2012 using the Potential Hazardous Waste Site Assessment Form provided in the INDOT Procedural Manual for Performing Environmental Studies. When a site visit was not possible, the reason(s) for not being able to visit the site were documented on the INDOT form. In such cases, appropriate information on each site was provided along with any off-site visual observations.

The information developed through these additional analyses was considered in the selection of the Refined Preferred Alternative 8.

1.2.3 Activities Completed for the Preferred Alternative

The alternative screening process for Section 5 resulted in the selection of six alternatives carried forward for detailed analysis in the FEIS: Alternatives 4, 5, 6, 7, 8, and Refined Preferred Alternative 8. The figures depicting Alternatives 4, 5, 6, 7, 8, and Refined Preferred Alternative 8 are provided in **Appendix C** of this report. Additional analyses were completed for all hazardous waste sites located within the proposed initial rights-of-way of Alternatives 4, 5, 6, 7, 8, and Refined Preferred Alternative 8. In addition, potential impacts to or from sites not located within the proposed right-of-way Alternatives were also considered in determining whether or not a site warranted additional analysis. Once the Refined Preferred Alternative 8 was identified, more detailed information was developed regarding hazardous waste impacts. For known or potential hazardous waste sites encountered by the preferred alternative, information about the site, the potential involvement, impacts and public health concerns of the affected alternative and the proposed mitigation measures to eliminate or minimize impacts or public health concerns are discussed.

The **Section 3** *Activities Completed for Alternatives Carried Forward for Detailed Analysis* summarizes the sites, locations and issues as public or private, active or inactive, above ground or buried, and by the type of pollutants encountered or of concern (e.g. solid, liquid, organic, or inorganic). Where appropriate for specific sites of concern, the discussion includes the possibility of encountering run-off or other underground infringement by highway right-of-way activity.

As part of **Section 4** *Activities Completed for the Preferred Alternative Sites* and **Section 5** *Mitigation*, the sites identified for further evaluation were categorized for potential mitigation measures based upon their potential to impact the build alternatives and the Refined Preferred Alternative 8. The mitigation categories include:

- **Final Design Confirmation** – This measure applies to sites where the final design contractor should confirm that the final design construction limits, right-of-way, and excavation depths avoid residual contamination and migration routes for the site, as was anticipated for the Refined Preferred Alternative 8 at the FEIS level of design. Confirmation will consist, at a minimum, of checking that the final design construction limits are within existing SR 37 right-of-way or at least within the Refined Preferred Alternative 8 construction limits, and that excavation depths are less than 10 feet below ground surface. In the event that avoidance of potential residual contamination or a migration route cannot be confirmed during final design, a Phase II Environmental Site Assessment (ESA) would be recommended.

- **Phase I ESA** – This measure applies to sites where the State would acquire a portion of the property as part of the Refined Preferred Alternative 8 right-of-way and additional information beyond that evaluated as part of the Section 5 FEIS is recommended. A Phase I ESA consists of an updated agency database review, IDEM VFC review, interviews of site and adjacent property owners and applicable agencies, title/property ownership research, historic aerial photographs, topographic maps, city directories, insurance maps, and a site reconnaissance prior to acquisition of the property. The Phase I ESA may include a recommendation for a subsequent Phase II ESA; however, based upon available information, a Phase I may not be necessary for recommendation of a Phase II.

- **Phase II ESA** – This measure applies to sites either following Phase I ESA recommendation or that are already recognized as having potential residual contamination and/or migration routes as part of the Refined Preferred Alternative 8 FEIS evaluations. These may be due to potential for contamination in planned property acquisition areas or properties adjacent to the Refined Preferred Alternative 8. A Phase II ESA consists of soil and/or groundwater sample collection for confirmation or investigation of potentially contaminated materials within the Section 5 Project from an off-site source prior to construction activities at a given location. The Phase II recommendations were based upon Section 5 FEIS agency records, interviews, and site observations for the Refined Preferred Alternative 8. While a Phase I ESA is not necessarily a requirement for conducting a Phase II ESA, a Phase I ESA may include a recommendation for a Phase II ESA.

- **Mitigation Commitment –** Such measures apply to sites that were not directly impacted but where mitigation commitments have been made in response to a regulatory agency request to address potential indirect impacts from the Refined Preferred Alternative 8.

- **Caution** – Locations where non-site specific potential hazardous materials could be encountered as part of the Refined Preferred Alternative 8 such as:

    - If undocumented underground storage tanks (USTs) are encountered, they will be removed in accordance with applicable state and federal laws and regulations. As part of the removal of the USTs, an impact assessment consisting of soil and/or groundwater testing will be performed.
    - Coordination will occur with the utility and private owners of electrical transformers before and during construction for proper handling and removal of any transformers or pipes affected by Refined Preferred Alternative 8.

2 Activities Completed for the Entire Corridor

2.1 Introduction

Hazardous waste sites are regulated by the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). During the Tier 2 process, the locations of permitted and non-regulated hazardous waste sites have been identified. The INDOT Potential Hazardous Waste Site Assessment Form was used during the Tier 2 EIS process. If a known or potential hazardous waste site is impacted by an alternative, information about the site, the potential involvement, impacts and public health concerns of the affected alternative(s) and the proposed mitigation measures to eliminate or minimize impacts or public health concerns are discussed. Known or potential waste sites are identified and located on a map showing their relationship to the 2,000-ft Section 5 corridor (**Figure 2-1**).

Government databases used for identification of potential sites include:

1. **CERCLIS** (Comprehensive Environmental Response, Compensation and Liability Information System) - The USEPA CERCLA listing tracks sites that have come to the USEPA's attention as having potential for releasing hazardous substances into the environment. CERCLIS listings contain sites listed on the National Priorities List (NPL) as well as sites that have been proposed for possible inclusion.

2. **NPL** (National Priority List) - USEPA's NPL is a subset of the CERCLIS database. The NPL list includes sites designated under the Superfund Program.

3. **NFRAP** (USEPA Comprehensive Environmental Response, Compensation, and Liability Information System Archived Sites—No Further Remedial Action Planned) - Sites listed in this database are those for which, to the best of the USEPA's knowledge, assessment has been completed and no further remedial action is planned. These sites are considered no longer eligible for inclusion on the NPL.

4. **RCRIS TSD** (USEPA Resource Conservation and Recovery Information System Treatment, Storage, and Disposal Facilities) - This database lists facilities that treat, store, or dispose of hazardous wastes.

5. **RCRIS COR** (USEPA Resource Conservation and Recovery Information System Corrective Action Sites) - The USEPA CORRACTS database identifies hazardous waste handlers undertaking corrective action as directed by USEPA under RCRA.

6. **RCRIS GEN** (USEPA Resource Conservation and Recovery Information System Large and Small Quantity Generators) - This database contains listings for sites that generate hazardous waste or meet other RCRA requirements.

7. **ERNS** (USEPA Emergency Response Notification System) - The USEPA ERNS serves to store information on releases of oil and hazardous substances into the environment. The USEPA National Response Center (NRC) is the source of the data included in ERNS listings.

8. **State Sites** - The IDEM list of all hazardous waste inventory sites as maintained by the Office of Land Quality (OLQ).

9. **SWL** (IDEM Solid Waste Landfill List) - The IDEM database listing of landfills and transfer stations as maintained by the OLQ.

10. **UST -** The IDEM database listing of all registered Underground Storage Tanks (USTs) as maintained by the OLQ UST (UST) Section.

11. **LUST** - The IDEM database listing of all Leaking Underground Storage Tanks (LUSTs) as maintained by the OLQ LUST Section.

12. **Indiana Spills** - Occurrences of releases of hazardous materials that are reported to IDEM and recorded in Spill Reports. Information recorded normally includes the date and location of the spill, type and quantity of material released, cleanup measures and any other pertinent information provided by the reporter. Most Spills Reports are related to trucking activities, crashes, or vehicle fueling activities.

Basic information regarding locations and types of hazardous waste sites was gathered throughout the corridor as previously described in **Section 1.2.1**.

2.2 Potential Hazardous Waste Sites

Figure 2-1 depicts the locations of 64 potential hazardous waste sites identified in the previously described data gathering that were within appropriate ASTM search distances from the 2,000-foot wide Section 5 corridor. The figure shows site locations based upon the associated Monroe and Morgan Counties' permanent real estate numbers and locations corrected based upon field check and agency coordination. **Table 2-1** provides a list (from South to North) of these sites including the name and address of each site (circa 2012), distances from the 2,000-foot wide corridor and the existing SR 37 pavement, county real estate parcel numbers, site numbers corresponding to their locations on the EDR search map (**Appendix A**), data sources (e.g., state and federal databases under which the sites are listed), and notes regarding the nature of the potential hazardous waste source(s) on each site. Superfund sites and sites deemed appropriate for additional review are highlighted. Maps derived from the Monroe County on-line GIS website (http://www.co.monroe.in.us/tsd/GIS.aspx /) depicting the locations of each parcel are provided in **Appendix B** of this report.

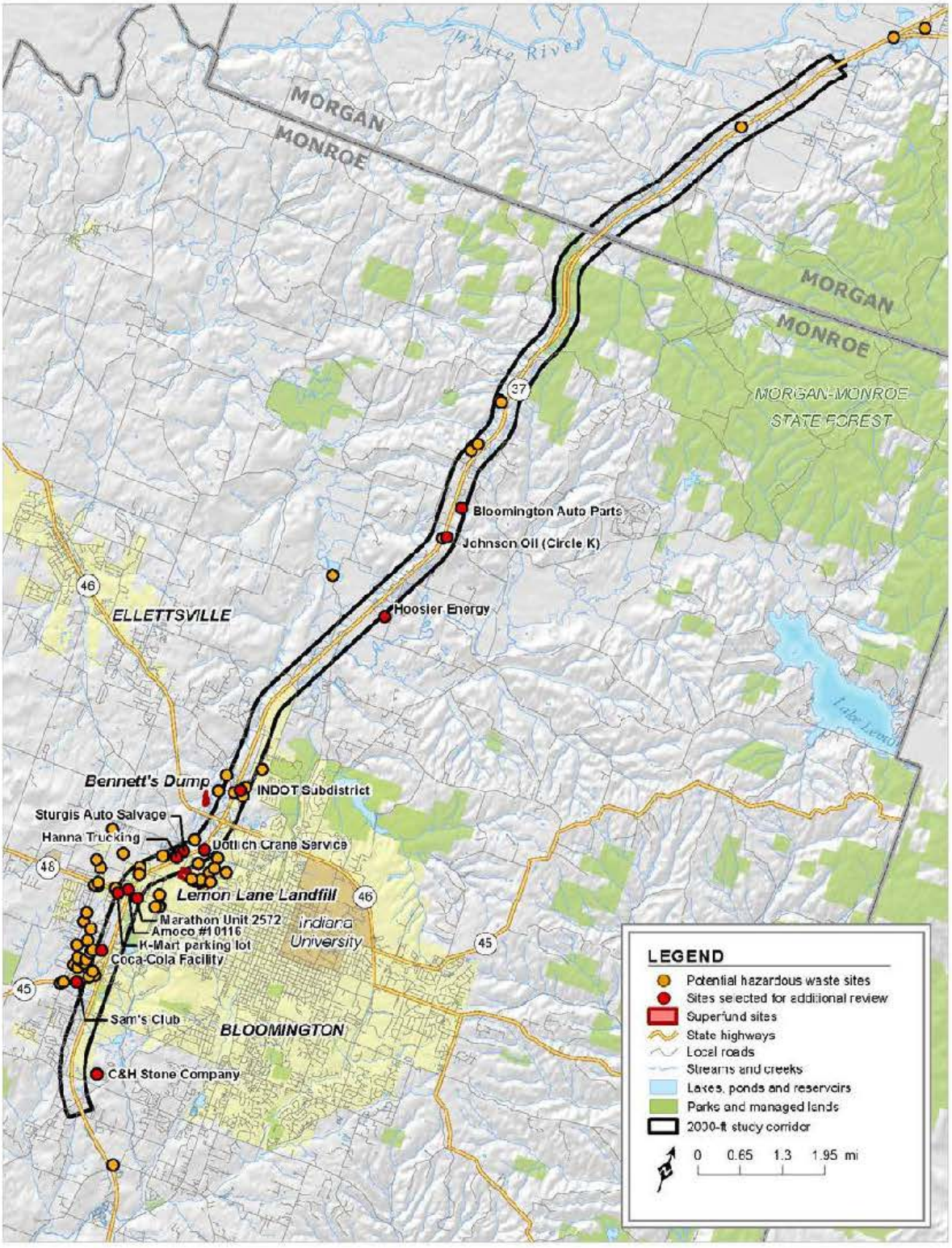

Figure 2-1: Potential Hazardous Waste Sites in the I-69 Section 5 Study Area

Table 2-1 Potential Hazardous Waste Sites Within ASTM Search Distances of 2,000-Foot Study Corridor - Listed by Distance from the Project Limits

Distance From:		Site ID #	Facility Type	Name / Address	Parcel #	Database(s)										Status / Notes
Corridor	Pavement					Facility ID (s)	NPL (Super fund)	LUST	UST	Industrial /RCRIS	CERC-NFRAP	IN Spills	CERCLIS	FINDS	Other(s)	
Within	Within	48	Roadway	SR 37N & WAYPORT RD. 37N & WAYPORT RD., BLOOMINGTON	Not applicable	S105103518	-	-	-	-	-	X	-	-	-	Approximately 100 gallons of diesel fuel spilled in 1996, recovered amount unreported.
Within	Within	49	Roadway	2 INDOT Bridge 37 55 3106 1.07 miles S of SR 39, MARTINSVILLE	Not applicable	IND985029511 IND985029503	-	-	-	-	-		-	X	-	Non-generator hazardous waste for minor spill cleanup.
Within	Within	50	Roadway	37 SS 3106 JSBL 1.07 MI S SR 39 1.07 miles S of SR 39, MARTINSVILLE	Not applicable	1000825343 IND985029503	-	-	-	-	-	-	-	X	-	Non-generator hazardous waste for minor spill cleanup.
Within	Adjacent	3 Site Carried Forward HM-2	Gas Station	SAMS CLUB #6437 3205 W. SR 45 BLOOMINGTON	017-06310-00	IN Spills: 199711130 UST: 24696			X			X				Spill 11/21/97, 5 gallons motor oil and water that affected sanitary sewer water; notification for installation of 3 gasoline USTs in 7/03, first referenced operations date 6/04.
Within	Adjacent	28 Site Carried Forward HM-9	Towing and Savage Yard	STURGIS AUTO SALVAGE, 2810 W. HENSONBURG RD. BLOOMINGTON	53-05-31-101-040.000-004, 53-05-31-101-028.000-004, 53-05-31-101-018.000-004, 53-05-31-101-025.000-004, 53-05-31-101-008.000-004	Field Observations										Not listed in any regulatory database; lot is a temporary salvage yard for wrecked vehicles, in service for over 25 years; 500-gallon used oil tank and drums observed in 2007.
Within	Adjacent	31 & 43 Site Carried Forward HM-12	Highway Maintenance	INDOT SUBDISTRICT 2965 N PROW RD. BLOOMINGTON	012-02620-00	IND984869016 1007093289 IND984903930 1000187532				SQG				X		No RCRIS Violations; a 500-gallon used oil tank and several 55-gallon drums of oil and hydraulic fluid use were observed; Historical SQG.
Within	Adjacent	33 Site Carried Forward HM-13	Electric Distribution and Transformer Repair	HOOSIER ENERGY 7398 N. SR 37 BLOOMINGTON	012-11980-00	IND062802574 IN Spill: 199309045 IN UST 15250 IN LUST 199308536		X	X		X	X				CERC-NFRAP Completed 6/12/87; Spill 9/5/93: 3 gallons gasoline spilled, 3 gallons recovered – no impact to water; 5 USTs permanently out of service/ 4 USTs (gasoline, diesel, used oil) “Currently in Use,” 1993 LUST low priority - discontinued on 5/10/1995.
Within	Adjacent	34 Site Carried Forward HM-14	Gas Station	FORMER JOHNSON OIL BIGFOOT #071 7340 N. WAYPORT RD. BLOOMINGTON	011-02310-04	LUST: 8907521 UST: 15707		X	X							LUST: NFA, 1994; UST: three tanks “Permanently out of Service” in 1989 five tanks “Currently In Use.”
Within	Adjacent	35 Site Carried Forward HM15	Auto Salvage Yard	BLOOMINGTON AUTO PARTS 7650 N. SR 37 BLOOMINGTON	011-06180-00	IN Spill 200412202						X				12/04: IDEM Incident report, “unknown material” affecting soil. 55-gallon motor oil drums observed; facility under enforcement action as a result of compliance violations noted during inspection of the facility in 2004.
Within	Adjacent	38* Site Carried Forward HM-10	Crane	DOTLICH CRANE SERVICE CRESCENT DR. AND W. 17TH ST. BLOOMINGTON	013-19205-00 013-02180-01 013-16575-00	Field Observations	-	-	-	-	-	-	-	-	-	550-gallon diesel AST and heavy equipment staged in gravel parking area; no further information.
Within	Adjacent	63* Site Carried Forward HM-5	Gas Station	FORMER AMOCO #10116 SR 48 AND SR 37 BLOOMINGTON	53-04-36-405-004.000-012	UST 1109 LUST 9005505		X	X							1989 LUST incident/removal of 5 USTs; partially acquired for SR 48/SR 37/ 3rd St. interchange in 1990, 1 well with benzene at 57 ppb; 10/6/1997 NFA ; in 1997, station removed for Whitehall Crossing development. Now a White Castle Restaurant.
Within	Adjacent	42 Site Carried Forward HM-6	Former Gas Station	FORMER MARATHON UNIT 2572 2572 / 2850 W. 3RD ST. BLOOMINGTON	008-11941-01	UST 5470 U003951370			X							4 USTs “Permanently Out of Service”; no sampling or assessment was reported.
Within	Adjacent	55* Site Carried Forward HM-1	Limestone Mill	C&H STONE 1500 ROGERS RD. BLOOMINGTON	014-02510-01	Field Observations	-	-	-	-	-	-	-	-	-	Observed in field, above ground tanks, drums, heavy equipment staging.
Within	Adjacent	**25** Site Carried Forward HM-8	Contractor Yard	HANNA TRUCKING / UNITED RENTAL / DAVE OMARA CONTRACTOR INC. 2520 INDUSTRIAL DR. BLOOMINGTON	012-08651-02 012-08651-01	UST 11903 IN Spill 199711132 LUST 200609521		X	X			X				Spill: 11/25/97, “Tire Fire Runoff & Smoke,” contained on-site, no impact to water. 2 USTs “Permanently Out of Service” 1/27/99 and a 2010 NFA letter from IDEM.
Within	Adjacent	13 Site Carried Forward HM-3	Bottling Facility	COCA COLA 1701 LIBERTY DR. BLOOMINGTON	017-29993-00	UST: 24686 LUST #200410510 INR000109512		X	X	SQG				X		3 USTs installed 1/1/87; UST removals in 2003, confirmed in 2006 by NFA letter from IDEM. No RCRIS violations.

Table 2-1 Potential Hazardous Waste Sites Within ASTM Search Distances of 2,000-Foot Study Corridor - Listed by Distance from the Project Limits (continued)

Distance From:		Site ID #	Facility Type	Name / Address	Parcel #	Database(s)										Status / Notes
Corridor	Pavement					Facility ID (s)	NPL (Super fund)	LUST	UST	Industrial /RCRIS	CERC-NFRAP	IN Spills	CERCLIS	FINDS	Other(s)	
Within	100 ft.	45	Dental Office	ASPEN DENTAL 330 N. JACOB DR. BLOOMINGTON	013-64850-06	1010563995 INR000121814	-	-	-	SQG	-	-	-	-	-	No RCRIS Violations; minimal disturbance along existing SR 37 right-of-way and mainline.
Within	100 ft.	36	Vacant	STAR OF INDIANA 8111 N. SR 37 BLOOMINGTON	011-01000-00	FINDS 110012115709								X		Charter bus terminal, no additional information available; minimal disturbance - matched existing pavement.
Within	100 ft.	37	State Police Post	DEPT. OF NATURAL RESOURCES / STATE POLICE 1500 PACKING HOUSE RD., #200 BLOOMINGTON	012-02630-02	Field Observations	-	-	-	-	-	-	-	-	-	Observed in field - AST; minimal disturbance - matched existing pavement.
Within	150 ft.	19 **Site Carried Forward HM-4**	Commercial	KMART #7402 3175 W. 3RD ST. BLOOMINGTON	017-05250-01	UST: 5039 FINDS: 110011987939			X					X		One UST “Permanently Out of Service” / removed in 11/1/90; no USTs currently on site.
Adjacent	200 ft.	21	Gas Station	WHITEHALL MARATHON #245 / KIEL BROTHERS OIL COMPANY 3324 W. 3RD ST. BLOOMINGTON	008-00050-04	UST: 24249			X							Two USTs “Currently In Use,” Installed 10/22/99; minimal disturbance - bike/ped upgrades and matched existing pavement.
Adjacent	400 ft.	6	Commercial	PAYLESS CASHWAYS 0248 2100 LIBERTY DR. BLOOMINGTON	017-23630-09	EPA/RCRIS: INR000005850				SQG				X		No RCRIS violations; Cowden Development - Site has been completely redeveloped into retail shopping and office complex; minimal disturbance - bike/ped upgrades and match existing pavement.
Within	500 ft.	53*	Gas Station	MURPHY USA NEW GAS STATION / MURPY USA #UT 3311 W. SR 45 BLOOMINGTON	016-35520-02	Field Observations	-	-	-	-	-	-	-	-	-	Observed in field, gas station; UST inspection reports, for 20,000-gallon and 8,000-gallon Gasoline, and 12,000-gallon Diesel USTs; No reported issues; minimal disturbance - bike/ped upgrades and matched existing pavement.
Within	500 ft.	40	School	BLOOMINGTON HIGH SCHOOL NORTH 3901 N. KINSER PIKE BLOOMINGTON	013-63180-00 013-63190-00	IN SWRCY S109949526	-	-	-	-	-	-	-	-	-	Recycling Facility.
Within	500 ft.	41	Commercial	PEP BOYS 3160 W. SUSAN DR. BLOOMINGTON	008-30030-11 013-64850-11	RCRA-CESQG 1004700428 FINDS INR000019620	-	-	-	SQG	-	-	-	X	-	No RCRIS violations.
Within	600 ft.	47	Quarry	REED QUARRIES INC. 2950 N. PROW RD. BLOOMINGTON	012-20630-00 012-20610-00 012-20625-00	Field Observations	-	-	-	-	-	-	-	-	-	Quarry listed as Orphan Site ID M300001923, various ASTs and storage areas observed on site.
Adjacent	900 ft.	12	Shipping	UPS 1700 LIBERTY DR. BLOOMINGTON	017-29990-03	UST: 17449 EPA/RCRIS: INR00001509			X	SQG				X	HMRIS	1 UST “Currently In Use,” installed 12/1/88; 1 UST “Permanently Out of Service,” Closure Date 6/1/93; No RCRIS violations; HMRIS report: 4/22/94 0.039 gallon amyl acetate leaked from a 1 gallon container.
Adjacent	900 ft.	30	Roadway	2001 HUNTER RD.	012-12740-05 012-12740-01	IN Spill: 200108085						X				Spill 8/8/2001: Source, amount, material, and impact to water not reported.
Within	900 ft.	39	Manufacturing	FEREE CABINET 2356 W. INDUSTRIAL PARK DR. BLOOMINGTON	012-08650-01 012-08650-11	RCRA-SQG 1010317657 INR000117481	-	-	-	SQG	-	-	-	-	-	No RCRIS violations.

Table 2-1 Potential Hazardous Waste Sites Within ASTM Search Distances of 2,000-Foot Study Corridor - Listed by Distance from the Project Limits (continued)

Distance From:		Site ID #	Facility Type	Name / Address	Parcel #	Database(s)										Status / Notes
Corridor	Pavement					Facility ID (s)	NPL (Super fund)	LUST	UST	Industrial /RCRIS	CERC-NFRAP	IN Spills	CERCLIS	FINDS	Other(s)	
Adjacent	1,000 ft.	52*	Commercial	NEW WALMART 3585 W. SR 45 BLOOMINGTON	016-35520-00	Field Observations	-	-	-	-	-	-	-	-	-	Observed in field, repair, oil and lube; Small Quantity Haz Waste Generator and Office of Land Quality Reports; minimal disturbance - bike/ped upgrades and matched existing pavement.
1200 ft	1,000 ft.	4	Shipping	PENSKE TRUCK 2212 S. YOST AVE. BLOOMINGTON	016-20790-00	IND981799505 LUST:199302519 UST: 18624		X	X	SQG				X		LUST: 2/93, low priority, affecting soil “Discontinued;” 1 UST “Permanently Out of Service” 2/17/93; 1 UST “Currently in Use: No RCRIS violations.
1200 ft	1,000 ft.	5	Vacant	FORMER MAACO AUTO PAINTING 1901-2170 or 2207/2707 S. YOST AVE. BLOOMINGTON	016-20790-00	EPA/RCRIS: INR000005256				SQG				X		No RCRIS violations.
Adjacent	1,000 ft.	9	Shipping; Commercial	SCHULTE CORP/ Now PTS CORPORATION 2000 LIBERTY DR. BLOOMINGTON	016-29990-01	EPA/RCRIS: INR000104836				SQG						2 RCRIS violations, but compliance achieved 1/15/02.
Adjacent	1,000 ft.	10	Equipment staging	FORMER JE CRIDER 1900 LIBERTY DR. BLOOMINGTON	017-29990-02	IN Spills: 199708062						X				Spill 8/12/97, diesel fuel; historical spills due to fueling from two ASTs; stained soils observed by IDEM, No immediate action required, recommended removing stained soils and installing secondary containment.
Adjacent	1,000 ft.	24 **Site Carried Forward HM-7**	Solid Waste Disposal	LEMON LANE LANDFILL LEMON LANE, BLOOMINGTON	013-32075-00 013-19515-00	EPA: IND980794341 7500018	X			SQG			X	X	ROD	10-acre landfill used for PCB-containing wastes. ROD issued 5/12/2000; site remediation conducted in 2000, water treatment on-going.
Adjacent	1,000 ft.	26	Contractor Yard	NEIDIGH CONSTRUCTION 2220 W. VERNAL PIKE BLOOMINGTON	013-21705-00	UST: 24498			X							Two USTs “Currently in Use” installed 7/1/87.
Adjacent	1,000 ft.	29 **Site Carried Forward HM-11**	Solid Waste Disposal	BENNETT’S STONE QUARRY SR 37 AND SR 46 BLOOMINGTON	012-02220-00	EPA: IND006418651 7500010	X			SQG			X	X	ROD	4-acre former quarry pit used as a dump for various materials including PCB-containing waste. ROD issued 10/16/98; remediation conducted in 2000-2002; water monitoring and follow-up investigations on-going, additional cleanup may be required.
Within	1,000 ft.	46	Quarry	BG HOADLEY QUARRIES INC 3600 S. ROCKPORT RD. BLOOMINGTON	014-02510-00	Field Observations	-	-	-	-	-	-	-	-	-	Quarry listed as an Orphan Site ID M300001921.
1,000 ft.	1,200 ft.	7	Metal Coatings	CIRCLE PROSCO 2017 YOST AVE. BLOOMINGTON	016-20790-00	EPA/RCRIS: IND984877738 IND984877381				SQG						6 RCRIS violations, but compliance achieved 2/21/01.
1,000 ft.	1,200 ft.	8	Shipping	FED. EXPRESS 3900 ROLL AVE. BLOOMINGTON	016-20790-00	EPA/RCRIS: IND984876540				SQG				X		No RCRIS violations.
500 ft.	1,200 ft.	44	Vacant	FORMER LEON MULLIS PROPERTY 1204 LINDBERG DRIVE BLOOMINGTON	012-10020-00		-	-	-	-	-	-	-	-	-	Orphan Site.
400 ft.	1,300 ft.	14	Manufacturing	SABIN CORP / COOK POLYMER 3800 W. CONSTITUTION WAY BLOOMINGTON	016-24290-01	S1004699259 IND984866624 IND98486662 IND0428239484				SQG				X		No RCRIS violations reported.
600 ft.	1,500 ft.	15	Manufacturing	OTIS ELEVATOR COMPANY INC GEA Bloomington Product Operation 1331 S. CURRY PIKE BLOOMINGTON	016-19550-00	EPA/RCRIS IND003938701 IND000803726				LQG				X	TRIS	Waste codes D018 (Benzene), F005 (Wastewater treatment sludges from electroplating operations); 5 RCRIS violations reported, but compliance achieved as of 8/5/98.

Table 2-1 Potential Hazardous Waste Sites Within ASTM Search Distances of 2,000-Foot Study Corridor - Listed by Distance from the Project Limits (continued)

Distance From:		Site ID #	Facility Type	Name / Address	Parcel #	Database(s)										Status / Notes
Corridor	Pavement					Facility ID (s)	NPL (Super fund)	LUST	UST	Industrial /RCRIS	CERC-NFRAP	IN Spills	CERCLIS	FINDS	Other(s)	
500 ft.	1,500 ft.	23	Manufacturing	ABB POWER CO 300 N. CURRY PIKE BLOOMINGTON	007-30030-00	UST: 7082 IN Spills: 198902052 199107140 IND006062467				SQG		X	X	X	PADS RAATS CORRACTS	CERCLIS Site description states "soil contamination of PCBs down gradient of active facility soil;" assigned "medium corrective action priority," Admin order on consent completed 8/20/2001; Spill 2/16/89, 5 gallon waste cutting oil, water in Stout Creek impacted; Spill 7/24/91: mineral oil, unknown impact to water; 1 UST "Permanently Out of Service," 11 RCRIS violations, but compliance achieved.
700 ft.	1,600 ft.	56*	Manufacturing	BAXTER HEALTHCARE CORP 725 S. CURRY PIKE BLOOMINGTON	53-09-01-100-040.000-015	6932208				SQG						No RCRIS violations.
1,700 ft.	1,800 ft.	2	Gas Station	SMALL TOWN PROPERTIES 2501 S. LEONARD SPRINGS RD. BLOOMINGTON	016-16930-00	LUST:199509510 UST: 5398		X	X							LUST: 9/95, Low Priority, affected media not reported, NFA granted 12/11/95; 5 USTs "Permanently Out of Service," no closure dates reported; 4 USTs "Permanently Out of Service," Closure date 8/95.
1,600 ft.	1,800 ft.	17	Gas Station	SPEEDWAY / SM 06009 3939 W. 3RD ST. BLOOMINGTON	017-10600-00	LUST: 200307511 UST: 6725		X	X							LUST 7/5/2003, "Active," medium priority, affecting soil; LUST 1/5/1999, "Discontinued," low priority affecting soil; 6 USTs "Currently in use," installed 8/1/89; 7 USTs "Permanently Out of Service," no closure dates reported. 5/05: LUST still active; additional investigation requested by IDEM.
1,700 ft.	1,800 ft.	20	Former Gas Station	FORMER SHELL STATION/ Now CVS PHARMACY 3940 W. 3RD ST. BLOOMINGTON	008-00030-00	LUST: 200110512 UST: 107		X	X							LUST 10/052001, "Active," medium priority affecting soil and groundwater. 12/04: Conditional NFA letter issued by IDEM.
1,600 ft.	1,800 ft.	54*	Sand and Gravel Pit	MORGAN COUNTY SAND & GRAVEL 1500 ROGERS RD. MARTINSVILLE	55-13-07-200-004.000-020	LUST/UST: 8216		X	X							Site is incorrectly mapped by EDR; Not within ASTM search radius for LUSTs or USTs. 5/04: IDEM letter – TPH below detection limits.
1,700 ft.	1,900 ft.	18	Gas Station	HIGHLAND VILLAGE MARATHON 4001 W. 3RD ST. BLOOMINGTON	017-28200-00	LUST: 199210149 UST: 5380		X	X							LUST 10/92, "Active," high priority affecting soil, groundwater, surface water and vapor; 2 USTs "Permanently out of Service," 12/94 & 2/2000; 4 tanks "Currently In Use" installed 7/85. 1/01 Corrective Action Plan/natural attenuation remediation initiated; 7/04, BTEX/MTBE plume receding.
1,500 ft.	2,000 ft.	16	Oil Change	MR LUBIE / EMRO MARKETING BONDED #1317/ BONDED 1317 2313 W. 3RD ST. BLOOMINGTON	015-06010-00	LUST: 2426 EPA/RCRIS: IND984890889		X		SQG						LUSTs: 7/95, 3/96 & 3/92: NFA granted; No RCRIS violations
1,800 ft.	2,000 ft.	1	Gas Station	JOHNSON OIL BIGFOOT #029 2510 S. LEONARD SPRINGS RD. BLOOMINGTON	016-17020-00	LUST:199608129 UST: 9082		X	X							LUST: 8/96, Low Priority, affecting soil, "Discontinued;" 5 USTs "Permanently out of Service,", 6/1/90; 3 USTs "Currently in Use," installed 9/25/96
1,500 ft.	2,000 ft.	57*	Shipping	UNITED PARCEL SERVICE 1833 S. CURRY PIKE BLOOMINGTON	53-09-12-100-002.000-015	1716			X							Beyond the search radii; UST Closure Report of two (8000 and 2000 gal) gasoline and 1 (275 gal) Used Oil USTs in 1980s
1,000 ft.	2,000 ft.	59*	Manufacturing	LOEWEN GROUP, INC. Approximately 103 S. JOHNSON AVE. BLOOMINGTON	53-09-01-100-040.000-015	200101016						X				Emergency Response State Clean-up; LUST (heating oil) 175 cubic yards soil excavated; Incident No. 2001 01 016; TPH confirmation samples taken below regulatory limits
1,800 ft.	2,000 ft.	62*	Unknown	DYER 1000 W. 15TH ST. BLOOMINGTON	53-05-32-201-114.000-005	9379			X							Beyond the search radii; listed in IDEM virtual file cabinet but no documents were shown.

Table 2-1 Potential Hazardous Waste Sites Within ASTM Search Distances of 2,000-Foot Study Corridor - Listed by Distance from the Project Limits (continued)

Distance From:		Site ID #	Facility Type	Name / Address	Parcel #	Database(s)										Status / Notes
Corridor	Pavement					Facility ID (s)	NPL (Super fund)	LUST	UST	Industrial /RCRIS	CERC-NFRAP	IN Spills	CERCLIS	FINDS	Other(s)	
1,500 ft.	2,200 ft.	11	Shipping	FORMER YELLOW FREIGHT 1805 S CURRY PK BLOOMINGTON	016-01200-01	LUST:199501508 UST: 19202		X	X							LUST: 1/95, Low Priority, affecting soil, "Discontinued;" 2 USTs "Permanently out of Service," 12/27/94; No additional Remediation recommended (Currently Perfection Bakeries)
1,400 ft.	2,200 ft.	58*		VERNAL MOBLEY 1220 S CURRY PIKE BLOOMINGTON	53-09-01-300-044.000-015	17663			X							Beyond the search radii; UST Closure Report of two (2000 gal) gasoline closed in 1990
1,900 ft.	2,400 ft.	22	Manufacturing	GENERAL ELECTRIC CO and GEA BLOOMINGTON PROD OPER LLC 301 N CURRY PIKE BLOOMINGTON	007-15610-00	LUST/UST: 17718EPA: IND000803726		X	X	LQG, TSD	X			X	PADS, TRIS, CORRACTS	RFI Completed 8/27/91; "low corrective action facility," CERC-NFRAP archive site 12/96; LQG-TSDF violations exist but compliance achieved; LUST 8/93, "Active," medium priority affecting soil and groundwater; 4/91: 6 USTs "Permanently out of Service." 4/95: Xylene levels in groundwater down gradient found to be below IDEM VRP goals.
500 to 1,800 ft.	1,000 to 2,500 ft.	64*	Roadway, vacant, other	VARIOUS ARCHIVED CERCLIS SITES 1701 W 17th St, Bloomington 1803 W Vernal Pike, Bloomington, 1204 N Lindbergh Dr., Bloomington 1611 W Gray St, Bloomington 1709 W Gray St, Bloomington 1801 W Gray St, Bloomington 1010 N Oolitic Dr., Bloomington 11th St & W Vernal Pike, Bloomington 1817 W Gray St, Bloomington	Various: 53-05-32-201-131.015-005 53-05-32-200-008.001-005 53-05-32-201-048.024-005 53-05-32-200-013.000-004 53-05-31-104-007.019-005 53-05-31-104-018.013-005 53-05-32-201-077.059-005 Roadway 53-05-31-104-015.010-005	EPA_ ID IND984868232 IND981001373 IND980999643 IND984868083 IND984868083 IND984868083 IND980999726 IND981093636 INSFN0507801					X						Given the distance from the project, the well-drained topography and underlying karst system, and that these sites were beyond the search radii, these sites were not carried forward for evaluation. Sites included: residence suspected of storing scrap w/ PCBs, alleged used for salvage of scrap w/ PCBs, property associated with PCBs salvage from Lemon Lane landfill, disposal of capacitors carry PCBs documented at site or listed in IDEM virtual file cabinet but no documents were shown.
1,700 ft.	2,700 ft.	61*	Salvage	HABITAT FOR HUMANITY LINDBERGH & OOLITIC BLOOMINGTON	53-05-32-201-022.156-005	4000005									X	Beyond the search radii; scavenger of electrical equipment containing PCBs, elevated lead found at site; Brownfield Site; elevated lead cleaned up residual arsenic present.
2,700 ft.	3,500 ft.	32	Sewage Treatment	BLUCHER POOLE WASTEWATER 5555 N BOTTOM BLOOMINGTON	012-29060-00	UST: 18420 IN Spill: 199808186 FINDS: 110001368957			X			X		X		One UST "Permanently Out of Service," Closure Date: 3/11/94; Spill 8/21/98, Source, amount, material, and impact to water not reported.
300 ft	3900 ft	27	Shipping	PYA/MONARCH 311 N CURRY PIKE BLOOMINGTON	007-30110-00	LUST/UST: 10061	-	X	X	-	-	-	-	-	-	LUST 11/95, NFA granted; 5 USTs "Permanently out of Service" 10/1/95
5,000 ft.	5,000 ft.	51	Sewage Treatment	CITY OF MARTINSVILLE WTP 995 RODGERS RD. MARTINSVILLE	55-13-08-305-001.000-021	24316 U003731063	-	-	-	X	-	-	-	-	-	LUST under incident number 200003211: soil identified as effective area.
5,000 ft.	5,000 ft.	60*	Gas Station	P&G ASSOCIATES / SUNMART FOOD STORE 5100 S VICTOR PIKE, BLOOMINGTON	53-08-29-200-023.000-008	22232			X							In the Section 4 study area but outside of the Section 5 study area.

* Sites not included in the Appendix A ASTM database search reports

= Superfund Site (Carried Forward for Additional Analysis)

= Site Carried Forward For Detailed Analysis

3 Activities Completed for Alternatives Carried Forward for Detailed Analysis

The alternative screening process for Section 5 resulted in the selection of six alternatives carried forward for detailed analysis: Alternatives 4, 5, 6, 7, 8, and Refined Preferred Alternative 8. Figures of these alternatives are provided in **Appendix C** of this report. Additional analyses were completed for all hazardous waste sites located within the proposed initial rights-of-way of the build alternatives. In addition, potential impacts to or from sites not located within the proposed right-of-way of the build alternatives were also considered in determining whether or not a site warranted additional analysis.

3.1 Initial Screening of Sites

As noted in **Table 2-1**, 64 potential hazardous wastes sites were found either within the specified ASTM search distances from the 2,000-foot Section 5 study corridor, IDEM identified locations, or identified based upon field observations. An evaluation of the materials and sources of concern on these sites, combined with their distances from the existing SR 37 right-of-way and the proposed right-of-way of the six Alternatives, resulted in the elimination of 49 sites that were deemed unlikely to pose concern for impacts to or from the alternatives. Sites deemed appropriate for additional analysis are highlighted in **Table 2-1** and are summarized in **Table 3-1** below:

Table 3-1 Potential Hazardous Waste Sites Carried Forward for Detailed Analysis

Site #	Facility Name and Address	Facility ID #	Classi-fication	Facility Type	Site Within Alternative Carried Forward for Detailed Analysis?	Site Within the right-of-way of Refined Preferred Alternative?	Phase II?
55 (Site Carried Forward HM-1)	C&H Stone 4000 Rockport Road Bloomington	NA	ASTs	Limestone Mill	Yes	Yes	Yes
3 (Site Carried Forward HM-2)	SAMS CLUB #6437 3205 West SR 45 Bloomington	IN Spills: 199711130 UST: 24696	UST, Indiana Spills	Retail and gas station	Yes	Yes	Yes
13 (Site Carried Forward HM-3)	COCA COLA 1701 Liberty Drive Bloomington	IN UST: 24686 EPA/RCRIS: INR000109512	LUST /UST, RCRIS-SQG	Soft Drink Bottling	Yes	No*	No*
19 (Site Carried Forward HM-4)	KMART #7402 3175 West 3rd Street Bloomington	IN LUST: 5039	UST	Shopping Store, former fueling facility	Yes	No*	No*
63 (Site Carried Forward HM-5)	FORMER AMOCO UNIT 10116 2850 West 3rd St BLOOMINGTON	1109	USTs	Former Gas Station	Yes	No*	Yes

Table 3-1 Potential Hazardous Waste Sites Carried Forward for Detailed Analysis (continued)

Site #	Facility Name and Address	Facility ID #	Classi-fication	Facility Type	Site Within Alternative Carried Forward for Detailed Analysis?	Site Within the right-of-way of Refined Preferred Alternative?	Phase II?
42 (Site Carried Forward HM-6)	FORMER MARATHON UNIT 2572 /2850 West 3rd Street Bloomington	008-11941-01	USTs	Former Gas Station	Yes	No*	No*
24 (Site Carried Forward HM-7)	LEMON LANE LANDFILL Bloomington	EPA: IND980794341	Super-fund	Solid Waste Landfill	Yes	No	No
25 (Site Carried Forward HM-8)	HANNA TRUCKING /UNITED RENTAL/ O'MARA CONTRACTOR 2520 Industrial Dr. Bloomington	IN UST: 11903 IN Spill: 199711132	UST, Indiana Spills	Truck Service	Yes	Yes	No*
28 (Site Carried Forward HM-9)	STURGIS AUTO SALVAGE, 2810 West Hensonburg Bloomington	NA	NA	Auto Salvage	Yes	Yes	Yes
38 (Site Carried Forward HM-10)	Dotlich CRANE SERVICES Crescent And West 17th Street Bloomington	013-02180-01 013-16575-00	–	Crane Equipment Yard	Yes	Yes	Yes
29 (Site Carried Forward HM-11)	BENNETT STONE QUARRY SR 37 and SR 46 Bloomington	EPA: IND006418651	Super-fund	Solid Waste Landfill	Yes	No	No
31 (Site Carried Forward HM-12)	INDOT SUBDIST 2965 North Prow Road Bloomington	IND984869016, EPA/RCRIS: 1000187532	RCRIS-SQG	INDOT Roadway Facility	Yes	No*	No*
33 (Site Carried Forward HM-13)	HOOSIER ENERGY 7398 North SR 37 Bloomington	IN LUST U004001926 IND062802574 IN Spill: 199309045	LUST /UST, Indiana Spills	Electric Utility	Yes	No*	No*
34 (Site Carried Forward HM-14)	JOHNSON OIL BIGFOOT #071 7340 WAYPORT Road, Bloomington	IN UST: 15707	LUST/ UST	Gas Station	Yes	Yes	Yes
35 (Site Carried Forward HM15)	BLOOMINGTON AUTO PARTS 7650 North SR 37 Bloomington	IN Spill 200412202	Indiana Spills	Auto Salvage Yard	Yes	No	Yes

* The final design contractor should confirm that the final design construction limits, right-of-way, and excavation depths avoid residual contamination and migration routes for the site, as was anticipated for the Refined Preferred Alternative 8 at the FEIS level of design. Confirmation will consist, at a minimum, of checking that the final design construction limits are within existing SR 37 right-of-way or at least within the Refined Preferred Alternative 8 construction limits, and that excavation depths are less than 10 feet below ground surface. In the event that avoidance of potential residual contamination or a migration route cannot be confirmed during final design, either a Phase I or Phase II ESA would be recommended.

3.2 Analysis

The fifteen sites listed in **Table 3-1** were evaluated for their potential to impact or be impacted by construction of Alternative 4, 5, 6, 7, 8, and Refined Preferred Alternative 8. Available documentation about each site was collected and reviewed. Property owners (or their representatives) were contacted (when possible), and interviews were conducted to obtain additional information about the historical and current conditions and uses of the sites. Site visits were conducted as allowed by the property owners to look for recognized and potential environmental concerns (e.g., USTs, ASTs and other hazardous material storage areas, stressed vegetation, etc.). An INDOT Potential Hazardous Waste Site Assessment Form was completed for each site. Detailed site maps were developed and photos were taken for those parcels for which site visits were conducted. Site Assessment Forms, Site Maps and Photologs for each site are provided in **Appendix D**.

3.2.1 Superfund Sites – Areas of Special Concern

There are two Superfund Sites located in the vicinity of both Alternatives 4, 5, 6, 7 8, and Refined Preferred Alternative 8, which, while not in or adjacent to any proposed ROW, are considered to be "Areas of Special Concern" in terms of highway drainage.

Lemon Lane Landfill (HM-7)

Lemon Lane Landfill is located southeast of the intersection of SR 37 and Vernal Pike (**Figure 3-1**). The site is located adjacent to the 2,000-foot corridor, approximately 1,000 feet from existing SR 37 pavement. However, the current alignment of SR 37 crosses the Illinois Central Spring (ILCS) recharge area from approximately 1,200 feet south to 1,200 feet north of the Vernal Pike intersection. While numerous documents are available on the IDEM VFC, Indiana University Geology Library, and official document repository at the Monroe County Library, the primary sources of information for the following description was USEPA's - *Second Five-Year Review Report for the Lemon Lane Landfill Monroe County, Indiana May 2010*, which evaluated the consolidation of the PCB waste, cap installation and maintenance, treatment of ILCS discharge water at the on-site treatment plant and upgrades to that system, and sediment removals from receiving waters.

A residential community of approximately 25 homes is located within one quarter mile from the eastern and northern boundaries of the site. A large cemetery exists south of the site, separated from the site by railroad tracks and right-of-way easements. The property east of the site is vacant land owned by Viacom. Within one mile of the landfill there are approximately 90 homes that obtain drinking water from private wells.

Lemon Lane Landfill currently is designated as a USEPA NPL (Superfund) site. The USEPA issued a Record of Decision (ROD) Amendment for the site on May 12, 2000. According to USEPA documents, from about 1958 until 1964, a large number of electrical capacitors containing polychlorinated biphenyls (PCBs) were dumped at the site. Throughout 1958 until

1964, PCBs were released from many of the electrical capacitors when metal scavengers broke open the capacitors to reclaim internal metal capacitor parts. Labels found on the capacitors linked the PCB contamination to the Westinghouse Electric Corporation, now doing business as CBS, which manufactured capacitors in Bloomington from about 1958 until the mid-1970s. In 1987, as required by a 1985 Consent Decree between USEPA et al. and CBS et al., Westinghouse removed exposed capacitors and stained soils from the site and capped the site with a synthetic cover. To provide security and limit potential exposure to remaining contaminants, the USEPA required a locked chain link fence around the site in 1987. The site currently is capped and fenced and groundwater treatment is on-going (see ROD and Fact Sheet in **Appendix D**).

Figure 3-1 – Lemon Lane Landfill located east of intersection of SR 37 and Vernal Pike

Source removal and encapsulation remedial measures have been completed at the former landfill site and included: Phase II Assessments and delineation; excavation and offsite landfill disposal of 80,087 tons of PCB contaminated material; offsite incineration and disposal of 4,402 capacitors; consolidation of 40,000 cubic yards of landfill material to an approximately 9-acre area; isolation of this landfill material via installation of a landfill cap, perimeter drainage, security fencing and a stormwater retention pond. The cleanup of areas outside the landfill boundary was to a high occupancy/residential standard of 2 ppm PCBs (on average) to the north (toward Vernal Pike), east and west (toward SR 37) sides of the site. The cleanup along the southern side toward the CSX railroad was to industrial standards. Potential exposure to landfill related soil contamination (in excess of construction worker standards) is minimal based upon the upgradient, higher elevation, and 1,000-foot separation from existing SR 37 and all of the Alternatives, and the completion of on-site soil remedial actions to residential standards.

Additional remedial actions address surface water and groundwater from the Superfund site that drain to the ILCS via conduits developed in the karst. Due to elevated PCB concentrations, water discharging from ILCS is captured and treated prior to release to surface water. While attempts were made to treat all of the water discharged from the ILCS, the plant's treatment rate (1,000 gpm via carbon adsorption) and storage capacities have been exceeded during historic peak flows. The highest PCB results were associated with these peak flows and threatened sediment and water quality in the receiving stream. Recent additions at the plant have added an additional 5,000 gpm treatment capacity. The combined treatment systems are expected to treat nearly 100% of the ILCS spring water and prevent 99.9% of the PCBs (by mass) from entering the receiving stream. A discussion of groundwater flow is provided in the Karst Report (Appendix Y of the I-69 Section 5 FEIS).

While none of the six alternatives will directly impact the Landfill, the current alignment of SR 37 and all of the six alignments cross the ILCS recharge area approximately 1,200' south, to 1,200' north of the existing Vernal Pike intersection. While attempts have been made to treat all of the water discharged from the ILCS, any change in land use that would increase the volume or frequency of the excess flow could have significant adverse impact on the effectiveness of the site's discharge treatment.

IDEM and facility operators have requested that the Section 5 design and planning processes take into account the overall goal of reducing the volume of water entering the ILCS recharge area. Since the ILCS treatment system operations directly affect the local surface water and sediment quality, and consequently potential human and ecological receptors, roadway pavement runoff control and redistribution outside of the recharge area has been given a high priority.

Bennett Stone Quarry (aka Bennett's Dump / HM-11)

The Bennett Stone Quarry USEPA NPL (Superfund) site (also referred to as Bennett's Dump), is owned by Ledge Wall Quarry LLC (former Star Quarry Inc.) and covers about four acres of the total parcel. It is located northwest of the current SR 46/SR 37 interchange, and west of the 2,000-foot corridor (approximately 1,000 feet from the existing SR 37 pavement, see **Figure 3-2**). While existing SR 46 and SR 37 are upgradient of the Bennett's Dump site, the Section 5 Alternatives are over 1,400 feet to the east of the site boundary.

While numerous documents are available on the IDEM VFC, Indiana University Geology Library, and official document repository at the Monroe County Library, the primary sources of information for the following description was USEPA's - *Third Five-Year Review Report for the Bennett Stone Quarry Monroe County, Indiana August 2012*, which evaluated the continuing release of PCBs from the springs into Stout Creek and determined that further investigation was required. The USEPA issued a ROD Amendment for the site on October 16, 1998. The site currently is capped and fenced, and groundwater treatment is on-going (see ROD and Fact Sheet in **Appendix D**). Property adjacent to the site was used for limestone cutting and quarry operations. Most residents living within one mile of the site are served by municipal water; however, some residents use private wells for drinking water.

According to USEPA documents, the site was formerly a limestone quarry pit, filled with various waste materials including demolition debris, household wastes, and electrical parts. A large number of electrical capacitors containing PCBs were dumped at the site during the 1960s and 1970s. Labels found on the capacitors linked the PCB contamination to the Westinghouse Electric Corporation (now doing business as CBS), which manufactured capacitors in Bloomington from about 1958 until the mid-1970s. In early 1984, Bennett Stone Quarry was added to a list of sites to be included in the Consent Decree negotiations with CBS et al. and USEPA, the City of Bloomington, Indiana State Board of Health, and Monroe County. A total of 55,000 cubic yards of PCB contaminated soils and materials were scheduled to be excavated and treated in the incinerator.

The 1998 USEPA ROD Amendment selected a cleanup remedy that included excavation and incineration of PCB contaminated material, sediment removal from Stout Creek, and long-term groundwater monitoring. CBS also agreed to investigate the groundwater to further understand the site hydrogeology and karst geology. After the cleanup activities were completed, five springs (Mound Spring, Middle Spring, Mid-North Spring, North Spring, and Rusty Spring on the Bennett's Dump site that discharge to the adjoining Stout Creek) showed PCB contamination. To address these springs, a passive drain system was installed in 2010 to allow upgradient abandoned quarry pits and waste stone areas to drain directly to Stout Creek, thereby bypassing residual contaminants at the dump site. The SR 46 extension was constructed south of the site. During construction, a group of former quarries were filled and portions of the Stout Creek drainage system were altered. The site has exhibited elevated groundwater levels since construction of SR 46.

The remedy for the source control area has been implemented with confirmation sampling showing residual PCBs in soils below the site cleanup level of 25 ppm. Potential exposure to landfill related soil contamination (in excess of construction worker standards) is minimal based upon the upgradient, higher elevation, and 1,000-foot separation from existing SR 37 and all of the alternatives, and the completion of on-site soil remedial actions to site cleanup standards.

The SR 46 extension was constructed south of the site in 2000. During construction, a group of former quarries were filled and portions of the Stout Creek drainage system were altered. The site has exhibited elevated groundwater levels since construction of SR 46.

Implementation of the 2006 ROD Amendment included alterations to existing quarries to reduce head pressures at the site. Remedial actions have included the excavation and off-site treatment/disposal of 37,913 tons of PCB contaminated soils and materials, installation of a passive drain system to allow upgradient abandoned quarry pits and waste stone areas to drain directly to Stout Creek, thereby bypassing residual contaminates at the dump site, and limited sediment removal and bank stabilization along Stout Creek. Mobilization of residual contaminants at the site has the potential to directly affect the local surface water and sediment quality, and to impact human and ecological receptors.

The remedy for groundwater has not been completely implemented, since low levels of PCBs continue to be detected at onsite springs. Based on recent data by USEPA, the PCB mass discharging into Stout Creek is being reduced by over 80% with the installation of a passive

quarry drain. While the passive quarry drain has been constructed and functioning well, PCBs continue to be released from on-site springs into Stout Creek, and further investigation into capturing and treating these releases is ongoing. The installation of a collection trench, on-site water treatment plant, and appropriate institutional controls are also under consideration as part of the completion of the groundwater remedy. A remedial option has not yet been chosen.

While none of the six alternatives will directly impact the Dump, the current alignment of SR 37 and all of the six alignments cross upgradient at the SR 37 and SR 46 interchange. Parties involved in ongoing remedial design and mitigation measures at the site have requested that the I-69 Section 5 design and planning processes take into account the overall goal of redirecting runoff around and away from the site. Management of roadway pavement runoff and diversion to areas either up or down stream, as well as drainage control during construction, should result in decreasing runoff to the site, and has been given a high priority.

Figure 3-2 - Bennett Stone Quarry located northwest of SR 37 and SR 46 interchange

3.2.2 UST and LUST Sites

Eight of the potential hazardous waste sites carried forward for additional review are listed in IDEM records as having current or past USTs and/or LUST incidents.

Sam's Club # 6437 (HM-2)

The Sam's Club # 6437 (Site 3), at 3205 W. SR 45, is located the SR 45/2nd Street interchange. The facility is listed as Site # 6437 in the IDEM UST database. Sam's Club is a small quantity generator. Based on review of historical records, the area was rural and mostly undeveloped, with some residential and retail/commercial uses along 3rd Street (east and west) prior to construction of SR 37 in the 1970s. No follow up was done based on project site history. Subsequently the area has undergone continuous development, with commercial, retail and professional/office as the dominant uses.

The site is an active, privately owned, gas station with subsurface concerns for liquid petroleum compounds (organic) with the potential for impacted soils and/or plume migration into the right-of-way of the six alternatives. The gas station has three 20,000-gallon gasoline USTs constructed of fiber glass. Records indicate that the USTs were first inspected in 2004, and have recently passed inspection in 2012. According to available IDEM records, three active gasoline fiberglass USTs are listed as currently in operation since installation in 2004 (see **Figure 3-3**). An auto maintenance facility is located in the building that provides tires, lubes, and minor repairs (see **Figure 3-4**). No staining or unusual activities were noted at the time of the inspection. While the relatively recent UST installation and lack of reported releases are positive factors, there remains a potential for contaminated soil and groundwater associated with the USTs.

Figure 3-3 – Sam's Club Service Station located at northeast portion of Site

Figure 3-4 – Sam's Club Tire Lube Maintenance Garage

Coca Cola Bottling Facility (HM-3)

The Coca Cola bottling facility (Site 13), at 1701 Liberty Drive, is located adjacent to western existing SR 37 ROW, just north of the SR 45/2nd Street interchange (**Figure 3-5**). The facility is listed as Site # 24686 in the IDEM UST database.

Historic records indicate the area was rural and mostly undeveloped, with some residential uses, prior to construction of SR 37 in the 1970s. Subsequently, the parcels on the east side of SR 37 (along Liberty Drive) were developed as light industrial, office and some retail (e.g., Wal-Mart and Sam's Club to the south). Areas to the west of Liberty Drive have been residential. According to available IDEM records, three USTs were installed at the facility in 1987; the owner reported UST removals in 2003, which was confirmed with a 2006 NFA letter from IDEM.

While the site is an active, privately owned, bottling facility, subsurface concerns for liquid petroleum compounds (organic) have been addressed per the NFA. The UST locations and low levels of petroleum in soil samples indicated a low potential for encountering contamination. While groundwater was not encountered during the investigation, the former USTs reported location is within the estimated drainage area of a two-acre sinkhole that extends under the site's parking lots. The presence of this sinkhole could allow groundwater to exit from the immediate tank area and result in the "no groundwater encountered" conditions reported at the site.

Since the site is located above (at a higher elevation) than the SR 37/I-69 and SR 45/2nd Street interchange, there remains a potential for impacted groundwater to have migrated from the former USTs location.

Migration via karst conduits is well documented in the Section 5 study area. In addition, the SR 45/2nd Street interchange area was identified as an Area of Concern due to the numerous buried sinks identified from interviews with INDOT staff present during SR 37 construction, and review of 1939 stereo-pair aerial photographs as part of the Section 5 karst studies (see the I-69 Tier 2 Section 5 Appendix Y).

Based on aerial photos and a windshield survey of the areas, adjacent land uses to the east, beyond SR 37 include apartment complexes, and farther east are residential developments and parkland. Adjacent to the north is the Bloomington Technology Park and farther north are office buildings. To the south are additional office buildings and farther south, across SR 45, are Wal-Mart and Sam's Club. To the east along Liberty Drive are office, light industrial and some retail stores.

The main concern for this site is its location (adjacent to SR 37) and higher elevation, which could have allowed contamination from leaking from the former USTs (if any exists) to migrate toward SR 37; there remains a potential for contaminated groundwater associated with the former USTs.

Figure 3-5 - Coca Cola Bottling Facility located northwest of SR 37 and 2nd Street/SR 45 interchange

Kmart Parking Lot (HM-4)

The Kmart #7402 parking lot (Site 19), at 3175 W. 3rd Street, is located adjacent to the western existing SR 37 ROW, just south of the SR 48/3rd Street interchange (**Figure 3-6**). The facility is listed as Site # 5039 in the IDEM UST database. According to available IDEM records, one UST installed in 1980, was listed as "Permanently Out of Service" with a closure date of November 16, 1990.

Historic records indicate that the area was rural and mostly undeveloped, with some residential and retail/commercial uses along 3rd Street (east and west) prior to construction of SR 37 in the 1970s. Subsequently, the area has undergone continuous development, with commercial, retail and professional/office as the dominant uses.

Based on aerial photos and windshield surveys, adjacent land uses to the north include a variety of department stores in Whitehall Plaza shopping center. Land uses to the west include various retail shops, restaurants, banks and professional offices along 3rd Street (with gasoline stations approximately 0.5-mile away at the intersection with Curry Pike). Land uses to the east include hotels, restaurants and retail stores along 3rd Street. Land uses to the south include larger office and light industrial buildings along the west side of SR 37.

Kmart representatives Bill Schlecht and Bob Keeler were contacted to obtain additional information on the site and, in particular, the former UST. Both Mr. Schlecht and Mr. Keeler stated they believed no USTs currently exist on the site; however, they declined to provide any additional information regarding the previous location(s) or removal dates, or to allow a site visit. The concern for this site would be if any right-of-way should be needed from the existing Kmart parking lot, or buildings located in its vicinity, for reconstruction/reconfiguration of the 3rd Street interchange. The location of the tank was to the east of the store and adjacent to the right-of-way of the corridor.

While the site is an active, privately owned, retail/commercial facility, subsurface concerns for liquid petroleum compounds (organic) with the potential for impacted soils and/or plume migration into the right-of-way of the six alternatives remain. The UST was removed and received a NFA from IDEM, however, due to the limited samples and analysis as well as it location along the east side of the K-Mart Building in close proximity to the proposed Alternatives, there remains a potential contaminated soil and groundwater associated with the former UST.

Figure 3-6 - Kmart Parking Lot located southwest SR 37 and 3rd Street/SR 48/Whitehall Pike interchange

Former Amoco Unit 10116 (HM-5)

The Former Amoco Unit 10116 (Site 63) is 0.5-acre and was located northwest of the SR 37 and SR 48/3rd Street interchange (**Figure 3-7**). The site is currently developed as a restaurant (White Castle) at 3100 West 3rd Street. Five USTs were reported closed in 1989 at the former gas station (one 10,000-gallon gasoline tank, two 8,000-gallon gasoline tanks, one 6,000-gallon diesel tank, and one 550-gallon waste oil tank). The former gas station, USTs, and contaminated soils were removed prior to the May 1990 SR 48/SR 37/3rd Street interchange construction, and subsequent 1997 Whitehall Crossing commercial development. As part of LUST incident #9005505, soil and groundwater met applicable commercial criteria with the exception of one monitoring well in which contaminant levels in groundwater had steadily decreased during the 1989 to 1997 monitoring. IDEM issued a NFA September 18, 1997. The site is an active, privately owned, fast food facility, with subsurface concerns for liquid petroleum compounds (organic) in soils that were addressed per the NFA. Since the former USTs and elevated groundwater detection were in close proximity or even at the existing SR 37 right-of-way, there remains a potential for contaminated soil and/or groundwater associated with the former USTs as part of the right-of-way of the six alternatives.

Figure 3-7 - Former Amoco Unit 10116 (currently a fast food restaurant) located northwest of SR 37 and SR 48/3rd Street interchange

Former Marathon Unit 2572 (HM-6)

The Former Marathon Unit 2572 service station (Site 42), currently a restaurant located at 2850 W. 3rd Street, is located adjacent to the east of the existing SR 37 ROW, just north of 3rd Street. (**Figure 3-8**). The facility is listed as Site # 5470 in the IDEM UST database. IDEM records indicate four USTs were installed at an unknown date and are "Permanently Out of Service" at former gas station (three 8,000-gallon gasoline tanks and one 500-gallon used oil tank). No sampling or assessment was reported. The site is an active, privately owned, restaurant, with subsurface concerns from the former operations related to liquid petroleum compounds (organic) in soils and/or groundwater. This facility will not be directly impacted by any of the six alternatives. Due to the close proximity of the former USTs to the Section 5 Corridor and lack of closure and sample data, there remains a potential for contaminated soil and groundwater associated with the USTs.

Figure 3-8 - Former Marathon Unit 2572 (currently a restaurant) located northeast of SR 37 and 3rd Street/SR 48/Whitehall Pike interchange

Hanna Trucking (aka United Rentals/ Dave O'Mara Construction / HM-8)

The Hanna Trucking facility (Site 25), also known as United Rentals, is currently owned by Dave O'Mara Construction, Inc. This facility is located at 2520 Industrial Drive, adjacent to the west of the existing SR 37 ROW, and just southwest of the SR 37/Vernal Pike intersection (**Figure 3-9**).

The facility is listed as Site # 11903 in the IDEM UST database. According to available IDEM records, three UST closures were completed at the site. As of December 4, 1998, one UST was listed as "Permanently Out of Service". A 1,000 gallon used oil UST was removed in 1999. The two other USTs (one 10,000-gallon diesel tank and one 2,000-gallon gasoline tank) were removed in 2006, and received a NFA letter in 2010 after site remediation (removal of approximately 800 tons of contaminated material). In addition, The Indiana Spills database lists one spill on November 25, 1997 as "Tire Fire Runoff & Smoke," contained on-site, with no impact to water.

The site is an active, privately owned, contractor facility, with past operations concerns for inorganic metals in surface soils and subsurface liquid petroleum compounds (organic) in soils and that were addressed per the NFA. Since 1998, the site has had multiple uses, including a retail equipment rental lot (home, yard and farm equipment, small tractors and lifts, tillers, tools, etc.) operated by United Rentals. This site is currently an equipment yard for Dave O'Mara Construction. Records and interviews indicate that the site had operated as Hanna Trucking from 1984 to 1998. Uses included storage of trucks, fueling, and minor repairs. Two USTs for gasoline and diesel were installed in 1984, removed in 1998 and replaced with fiberglass tanks. Prior to 1984, there was a small construction firm on the site with one building (no tanks or chemicals). The site was vacant prior to 1970. Based on aerial photos and windshield surveys, adjacent land uses include light industrial and commercial uses to the south and west (equipment rentals, storage facilities, metal working shop), but no heavy industrial or manufacturing uses. The lot adjacent to north is a new professional/retail strip mall.

Parcel owner Mr. William Hanna was interviewed on August 1, 2006, and confirmed that the two current USTs (one 10,000-gallon diesel tank and one 2,000-gallon gasoline tank) were installed in 1998, replacing two prior USTs that had been installed in 1984. Mr. Hanna indicated no leakage was found during tank removal, and no additional remediation had been required. Mr. Hanna indicated that a small tire fire had occurred on the site in 1997, but was extinguished and the grounds were cleaned up.

Figure 3-9 – Hanna Trucking (aka United Rentals/O'Mara Construction) located southwest of intersection of SR 37 and Vernal Pike

Mr. Bob Allen, United Rentals Branch Manager, was interviewed during a site visit conducted on August 17, 2006, and confirmed the locations of all tanks and provided additional information regarding current features and uses of the site. The main building, located along the west side of Industrial Drive, is used for offices and for servicing equipment. The offices are in the east portion of the building (closest to Industrial Drive). The service area (west end of building) contains three 300-gallon tanks for hydraulic fluid, motor oil, and used motor oil, all situated on the concrete floor. During the 2006 site visit, one 55-gallon drum of used oil also was observed in the building, and light staining was observed on the concrete near the tanks and drums. The second building is located on the far west side of the lot and is used for storage of large equipment. The floor is concrete; no tanks, drums, chemicals or stains were observed. The majority of the lot is fenced and gravel-covered, and is used for outdoor storage of rental equipment and vehicles; no staining was observed on the lot. An oil/water separation system is located outside the east side of the main building and filter media is changed every six months. Mr. Allen indicated the buildings do not contain any asbestos-containing materials. No transformers were observed on the parcel.

Due to the amount removed material and the potential for contamination to migrate beyond the investigation area in a karst area, there remains a potential for contaminated soil and groundwater associated with the former USTs.

Hoosier Energy (HM-13)

The Hoosier Energy (Site 33) utility headquarters, electrical distribution center, and transformer service and maintenance facility is located adjacent to the east of the existing SR 37 right-of-way between Walnut Street and Sample Road (**Figure 3-10**). Overall, the site appeared to be well kept with secondary containment in-place at bulk storage, fueling, and unloading areas. The facility has a Spill Prevention, Containment, and Control (SPCC) and Hazard Communication plans but does not have an NPDES permit (company stated that it was not required). Monitoring wells/points for potential release monitoring were noted adjacent to all of the USTs and fuel dispensing island. No staining or unusual activities were noted at the time of the 2012 inspection.

The western portion of the facility abuts the SR 37 right-of-way and consists of a combined headquarters, office, and electrical power distribution center building (limestone), a steel training building, picnic shelter, asphalt paved parking, and a UST. A 550-gallon diesel UST supplies fuel for an emergency backup generator is located approximately 150 feet east of the SR 37 right-of-way on the opposite/east side of the electrical distribution center (the southernmost portion of the headquarters building).

The eastern portion of the facility includes a transformer service and maintenance facility in the central of the parcel in rolling terrain and surrounded by security fencing. A small stream separates the western office areas from the transformer service and maintenance facility. The majority of the eastern parcel consists of undeveloped forest, wetlands, and streams. The transformer service and maintenance facility includes:

- A 405-foot high cellular communications tower is located along a small stream;
- An Operations Center building with an outside 2,600-gallon transformer oil storage AST, an inside 2,500-gallon transformer oil storage AST, 55-gallon drums of transformer, hydraulic, and waste oils, and stage transformers in secondary containment pads;
- Three storage buildings, a three-sided covered storage building (steel), and three equipment “lay-down” gravel covered yards with two empty portable tanks: a 500-gallon empty poly water tank and a 1,000-gallon transformer oil tank;
- A Maintenance Garage with two hydraulic lift bays, a 10,000-gallon gasoline UST, a 4,000-gallon diesel UST, a 550-gallon waste oil UST, and a fuel dispenser island; and,
- Two secondary containment transformer staging areas (6,500 ft^2 and 5,000 ft^2 in size).

Hoosier Energy also operates a fenced and gravel underlain electrical substation with one control shed to the north at 8517 Norm Anderson Road, Bloomington. Duke Energy also operates part of the substation (8513 Norm Anderson Rd.) with transformers and two control sheds.

During closure of five USTs in 1993, low levels of soil contamination was reported. The site was considered discontinued/low priority by IDEM in May 1995, based upon low residual but inaccessible soil contamination. These USTs were replaced with four USTs currently in operation. No comments were noted in the February 2013 IDEM inspection.

Based upon the proximity of the 550-gallon UST and long history of operations at the facility there remains a potential for contaminated soil and groundwater associated with the former and current USTs, ASTs, and transformers.

Figure 3-10 - Hoosier Energy located on eastside of SR 37 between Walnut Street and Sample Road

Johnson Oil Bigfoot #071 (aka Circle K-BP / HM-14)

The Johnson Oil Bigfoot service station (Site 34), currently operated by Circle K-BP, at 7340 North Wayport Road, is located adjacent to the eastern existing SR 37 ROW, just south of the SR 37/Sample Road intersection (**Figure 3-11**). The facility is listed as Site # 15707 in the IDEM UST database. A Phase II site investigation indicated low levels of contamination, and the three petroleum USTs were closed in 1989. These USTs were replaced with five USTs currently in operation and include: two 8,000-gallon tanks containing gasoline; one 12,000-gallon tank containing gasoline; one 8,000-gallon tank containing diesel fuel; and one 4,000-gallon tank containing kerosene. IDEM lists a single LUST incident, recorded July 28, 1989, affecting soil. The incident was categorized as low priority, and a "No Further Action" (NFA) was granted on September 28, 1989. The site is an active, privately owned, gas station, with subsurface concerns for liquid petroleum compounds (organic) for all six alternatives.

Historic records indicate the area was rural prior to the mid-1970s (when SR 37 was constructed). The site has operated as a gasoline filling station under several owners since the mid-1970s. Based on aerial photos and windshield surveys, adjacent land uses to the east include commercial uses (furniture shop, feed shop) followed by agricultural and residential uses. Uses to the north, south and west include agricultural, residential and wooded areas.

Circle K representative Christina Gosnell was interviewed during a site visit conducted on August 18, 2006. The exterior of the building was remodeled in 2001; but the USTs and pumps were not changed. There is a single structure on the site, with a large canopy over six gasoline and diesel pumps. Five USTs are currently located in a buried tank farm northwest of the building and paved parking lot. The building houses a convenience store.

According to Ms. Gosnell, no vehicle service is performed on-site, and no hazardous materials (other than fuels) are kept on site. There have been no spills reported at the site. Stormwater drainage flows mainly toward the west and northwest into a ditch running along the east side of SR 37. The site receives City of Bloomington water and has a septic sewage system. There is a septic tank located near the north edge of a grassy area north of the building. Trash is placed in dumpsters located on the pavement to the north of the building and is picked up by Hoosier Disposal. Due to the close proximity of the former and active USTs to the Section 5 Corridor, there remains a potential for contaminated soil and groundwater associated with the former and current USTs.

Figure 3-11 –Johnson Oil Bigfoot (aka BP/Circle K) located southeast of the intersection of SR 37 and Sample Road

3.2.3 RCRIS Sites

One potential hazardous waste site carried forward for additional review is listed in the USEPA RCRIS database.

INDOT Subdistrict (HM-12)

The INDOT Subdistrict (Site 31), at 2965 North Prow Road, is located adjacent to the east side of the existing SR 37 ROW, just north of the Arlington Road overpass (**Figure 3-12**) The INDOT Subdistrict site is listed as RCRIS # 1000187532, a conditionally exempt small quantity generator of hazardous waste. A 500-gallon used motor oil tank and several 55-gallon drums of oil and hydraulic fluid were observed during the site visit. The 12-acre site currently operates as a roadway maintenance facility with repair and salt vehicles, and storage and maintenance buildings. Interviews and historic records indicate that prior to 1990, the area consisted of farmland.

Based on a windshield survey, aerial photos and interviews, surrounding land uses include Prow Road to the east, a quarry to southeast and Bloomington High School North to the northeast. Arlington Road is located to the south and farther south is a small residential area and the SR 37/SR 46 interchange. Churches and residential houses are located along Prow Road to the north. SR 37 is located adjacent to west followed by residential apartments, wooded areas and another quarry.

INDOT Subdistrict Operations Manager Dan Lucas was interviewed during a site visit conducted on August 22, 2006. Mr. Lucas provided information regarding facility features and operations.

Mr. Lucas indicated he had managed the site since it opened in 1990. The site conducts maintenance on highway vehicles and equipment and stores salt and other equipment and tools. No fueling is done on site and there are no USTs or fuel ASTs. The lot is almost entirely paved with concrete, except for a grassy area along the east frontage (adjacent to SR 37) and, the far northwest corner of the lot where dirt, gravel and other road materials are stored in concrete bins. There currently are three buildings and a salt storage dome on site. The Main Building on the southwest side of the lot houses offices and the vehicle service garage. The staff, or "Crew" Building on the east side, adjacent to Prow Road, is for staff use and no maintenance activities are conducted in this building. The third building is a wooden salt shelter next to the salt dome. There is also a small concrete-walled used oil "house" adjacent to the west side of the garage building.

Figure 3-12 – INDOT Subdistrict located northeast of SR 37 and SR 46 interchange

The house contains a 500-gallon used oil tank and several 55-gallon drums of new and used motor oil and hydraulic fluid, all set on steel screening above a containment pit. Mr. Lucas indicated all used fluids are collected by an off-site vendor. The garage has a wash bay with drains along both sides of the building that lead to an oil/water separating system, which is periodically cleaned. Water exiting the separating system passes into a silt pit (located underground near the used oil house), which is periodically cleaned. The site receives city water and sewer service; there is a sewage grinding system adjacent to the north side of the main building/garage. The system has an alarm to indicate when it needs to be cleaned out. There is a transformer unit located to the north of the used oil house. Mr. Lucas indicated the unit does not contain PCBs. There is a gasoline-powered generator located near the transformer with an enclosed tank. Mr. Lucas indicated the generator is serviced by an off-site vendor. Very minor staining was observed in a few areas of the concrete-paved lot; but overall, the concrete appeared to be in good condition.

Electric power lines run across the west side of the lot adjacent to SR 37, and on the east side adjacent to Prow Road. Pole-mounted transformers were observed along the paths of the lines, but none on the INDOT property. While historic petroleum storage quantities have been minor and the site is not impacted by any of the six Alternatives, due to the close proximity of the facility to the Section 5 Corridor, there remains a potential for contaminated soil and groundwater associated with the site.

3.2.4 Other Hazardous Waste Sites of Concern

In addition to the sites listed on state and federal environmental databases, four additional hazardous waste sites warranting detailed study were determined through windshield surveys and interviews: C & H Stone, Sturgis Auto Salvage, Dotlich Crane Service, and Bloomington Auto Parts.

C & H Stone Inc. (HM-1)

C & H Stone Inc. is located at 4000 South Rockport Road, north of Fullerton Pike. The property has been a limestone fabrication and finishing facility for over 85 years. C & H Stone is located approximately 500 feet east of the existing SR 37 right-of-way along Fullerton Pike and northwest of the intersection of Fullerton Pike and Rockport Road (see **Figure 3-13**). The site has been in operation since 1927 and reportedly included a blacksmith forge, boilers, coal piles, steam powered cranes, locomotives, limestone quarrying and milling, truck and railroad shipping, various fuel tanks, lubricants, heavy equipment staging, operations, and maintenance, bulk material storage, settling ponds and water withdrawal points. The site is still an active limestone mill and former quarry with numerous buildings, cranes, heavy equipment, sawing pits, related equipment, former railroad spurs, and various gravel lots. Several 55-gallon drums of hydraulic fluid, and 300- and 500-gallon gasoline and diesel ASTs were noted at the facility. The site is an active, privately owned, limestone mill, with concerns for liquid petroleum compounds (organic), inorganic metals in surface soils and runoff as part of the right-of-way of the five of the six alternatives. Based upon the long history of operations, potential acquisition of the current office and parking area, there is a potential to encounter contaminated materials associated with this site.

Figure 3-13 – C&H Stone Company located east of SR 37 in northwest intersection of Fullerton Pike and Rockport Road

Sturgis Auto Salvage (HM-9)

Sturgis Auto Salvage lot (Site 28), at 2810 West Hensonburg Road, is located approximately 200 feet west of the existing SR 37 ROW, just north of the SR 37/Vernal Pike intersection (**Figure 3-14**). The salvage business actually consists of six separate parcels (all owned by Robert Sturgis) combined into two lots, separated by Hensonburg Road. The site is an active, privately owned, towing and salvage facility with concerns for liquid petroleum compounds (organic), inorganic metals in surface soils and runoff as part of the right-of-way of all six alternatives.

Since 1972, the site has been used as a salvage yard for automobiles that have been in crashes. The site holds the vehicles until insurance adjusters have evaluated them and then they are removed. The average "stay-time" for vehicles on the lot is three to five days. The company repairs and services some vehicles, but does not dismantle them for parts or store them indefinitely. There is one building on the east lot, and a fenced, gravel-covered storage area on the west lot. A portion of Vernal Pike runs to the east of the site and intersects with SR 37. Industrial Drive connects with Vernal Pike near the southeast corner of the Sturgis site and continues southward. Based on a windshield survey and interviews, adjacent land uses to the south include light industrial and commercial uses (equipment rentals, storage facilities and metal working shop, but no heavy industrial or manufacturing). To the west are residential lots, Vernal Pike, and residential and wooded areas to the north.

Property and business owner Mr. Robert Sturgis was interviewed during a site visit conducted August 17, 2006. Mr. Sturgis confirmed he has owned the property and business since 1972, prior to which a single-family residence was located there. Mr. Sturgis noted the surrounding areas were vacant when he began his business on the site. Mr. Sturgis indicated the average storage time for vehicles is less than a week, and that no vehicles are kept indefinitely. The east lot has one building that has six service bays with hydraulic lifts and is used for vehicle service. The floor of the building is concrete-paved. Slight surface staining was noted at various locations of the building. There is an elongated floor drain in the building; however, Mr. Sturgis indicated the drain is intentionally stopped. There are no USTs on the site. There is a single 600-gallon used oil tank located outside near the far northeast corner of the building on a concrete surface. The tank is emptied periodically by an off-site vendor.

Two 55-gallon drums containing motor oil were observed adjacent to the tank, and some surface staining was observed near the base of the tank. Mr. Sturgis indicated hydraulic fluid is used for the lifts, but is not stored in bulk on site. The north side of the east lot is gravel-covered and several vehicles were observed stored there; however, no surface staining or stressed vegetation was observed. While the site is on city water and sewer services, there is no oil/water separator system.

Mr. Sturgis indicated the property adjacent to the east (along the west side of Vernal Pike) is a former auto service and painting facility and may be of concern for impacts from paint and other chemicals. Scattered paint cans and other trash were also observed, but no indications of USTs or other tanks or storage containers were noted as of 2012.

Given the long history of petroleum storage and salvage operations (potential metals contamination) and the close proximity of the facility to the Section 5 corridor, there is a potential to encounter contaminated material associated with this site.

Figure 3-14 – Sturgis Auto Salvage located southwest of intersection of SR 37 and Vernal Pike

Dotlich Crane Service (HM-10)

The Dotlich Crane Service (Site 38) property stores and maintains crane equipment. It is located northwest of the intersection of Crescent Road and West 17th Street (**Figure 3-15**). Cranes and other related equipment are parked in a gravel lot at the facility. One 550-gallon AST containing diesel fuel was located at the facility. The site is an active, privately owned, crane operator facility, with concerns for liquid petroleum compounds (organic) in surface soils and runoff as part of the right-of-way of five of the six alternatives. Due to the site's likely inclusion in all of the build alternatives, potential for extensive intrusive construction activities (such as rock cuts, pier or footings excavation), there is a potential for contaminated soil and groundwater associated with the site.

Figure 3-15 – Dotlich Crane Service located northeast of the intersection of SR 37 and Vernal Pike

Bloomington Auto Parts (HM-15)

Bloomington Auto Parts (Site 35), at 7650 North SR 37, is located adjacent to the east side of existing SR 37 ROW, north of Sample Road (**Figure 3-16**). IDEM has given the site an Indiana Spills identification number (200412202) and reported that several truck-loads of contaminated soil were removed in 2004. In addition, the facility has been under enforcement action as a result of compliance violations noted during inspection of the facility in 2007. Past violations included open dumping of waste tires, oil from stored engines, refrigerants, soil contamination, storm water plans and monitoring. The site is an active, privately owned, automotive salvage and parts facility, with concerns for liquid petroleum compounds (organic) and inorganic metals in surface soils and runoff into the right-of-way of all six alternatives.

Since 1960, the 25-acre site has been used as an unpaved salvage yard for automobiles, which are stored for indefinite periods (some permanent) throughout the site. Parts are removed from cars periodically and sold. Historic records and interviews indicate that, prior to 1960, the site was vacant and partially wooded. Based on windshield surveys, aerial photos and interviews, adjacent land uses include streams and wooded areas to the north and south, wooded areas to the east, and SR 37, Wayport Kennels, and wooded areas to the west.

Bloomington Auto Parts business owner Mr. Charles Forney was interviewed during a site visit conducted on August 17, 2006. Mr. Forney at that time indicated his family is in the process of purchasing the property via a land contract from current owner, Gary Trimble, and has operated the business on the site since 1998. Mr. Forney indicated the site had been a salvage yard since approximately 1960, and before that it was vacant and wooded.

A fence separates the front of the lot from existing SR 37. The site is almost entirely unpaved. Mr. Forney indicated that vehicles are parked along dirt paths and parts are removed from them as needed to sell to customers. The lot slopes from its center to both the north and south. Near the north and south property edges, it slopes sharply downward toward streams running adjacent to both sides. There are a few places along both these borders where cars have fallen down the slopes toward the creeks, which cross under SR 37 via culverts. Mr. Forney indicated there are no USTs on the property, and no vehicle fueling is conducted on-site. There are three buildings on the lot. The main building on the west side of the lot near the entrance houses offices. A building attached to the east of the main building is used for parts storage. Three 55-gallon drums containing used motor oil were observed in this building. A third building located to the south of the main building is used as a garage for towed vehicles and also to store engines. Other than the office area of the main building, the floors of the buildings are unpaved (clay). Significant staining was observed on the floors of all three buildings, and some staining and stressed vegetation were observed in several areas throughout the lot.

The property receives city water and uses a septic system. A septic tank was observed near the northwest corner of the lot. According to Mr. Forney, a portion of the west side of the front of the lot was recently filled with a gravel/soil mixture to even out the slope to the south. Cars were observed parked in this area. No transformers were observed on the site. In the 2006 interview, Mr. Forney stated that IDEM had recently conducted a site visit on the property and expressed

concerns about stormwater runoff into the creeks, and also tire storage, oil spills, and outside storage of auto gas tanks and batteries. He indicated IDEM had requested the site develop a stormwater management plan and that he had hired an environmental consultant to do this. The results of IDEMs visit led to enforcement for compliance violations, as noted in a subsequent inspection of the facility in 2007. During the 2006 interview Mr. Fornedy stated that, to his knowledge, no Phase II sampling had been conducted.

Based upon long history of operations, observed operations, reported violations, and close proximity of potential contaminate sources to Section 5, there remains a potential for contaminated soil and groundwater associated with the site.

Figure 3-16 – Bloomington Auto Parts located northeast of the intersection of SR 37 and Sample Road

4 Activities Completed for the Preferred Alternative

Since the Section 5 mainline, interchange and frontage roads depicted for Alternatives 4, 5, 6, 7, 8 and Refined Preferred Alternative 8 are similarly located in the vicinities of most of the fifteen hazardous waste sites carried forward for detailed analysis, the potential concerns, proposed avoidance, and mitigation measures, are also similar. **Table 4-1** provides a summary of the hazardous waste sites carried forward in terms of locations, issues, type(s) of pollutants, proposed avoidance/mitigation options, and lists whether a confirmation of no impact, a Phase I ESA, or a Phase II investigation is warranted.

Table 4-1: Summary of Hazardous Waste Sites

Site ID	Site Name	Site Description	Affected Alternatives	Suggested Mitigation Measures
HM-1	C & H Stone 4000 Rockport Rd., Bloomington	Active limestone mill and former quarry with ASTs located east of SR 37, northwest of Fullerton Pike and Rockport Road intersection.	4, 5, 6, 8 and Refined Preferred Alternative 8	• Phase I ESA for acquisition southern part of the property due to long history of industrial operations; if recommended, a subsequent Phase II ESA • If encountered, excavate any contaminated materials
HM-2	Sam's Club 3205 W. SR 45, Bloomington	3 USTs "Currently In Use" and a minor (5 gallon) oil spill.	4, 5, 7, 8, and Refined Preferred Alternative 8	• Limited Phase II ESA for proposed property acquisition area in proximity to USTs and fuel island • If encountered, excavate any contaminated materials
HM-3	Coca Cola 1701 Liberty Dr., Bloomington	Bottling facility located northwest of 2nd Street interchange with three former USTs.	4 and 5	• No impact with Refined Preferred Alternative 8 • Final design contractor to confirm same condition (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface)
HM-4	KMART #7402 3175 W 3rd St., Bloomington	Former gasoline UST "Permanently Out of Service" (removed) location on the east side of the K-Mart parking lot.	4 and 5	• No impact with Refined Preferred Alternative 8 • Final design contractor to confirm same condition (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface)
HM-5	Former Amoco #10116 at 3100 W. 3rd. St., Bloomington	Former gas station with five USTs closed in 1989 located northwest of intersection of SR 37 and 3rd. St.	None	• No impact with Refined Preferred Alternative 8 • Final design contractor to confirm same condition (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface)
HM-6	Former Marathon (Unit 2572) 2830 W 3rd St., Bloomington	Former gas station with four USTs "Permanently Out of Service" located northeast of intersection of SR 37 and 3rd. St.	None	• No impact with Refined Preferred Alternative 8 • Final design contractor to confirm same condition (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface)

Table 4-1: Summary of Hazardous Waste Sites

Site ID	Site Name	Site Description	Affected Alternatives	Suggested Mitigation Measures
HM-7	Lemon Lane Landfill Bloomington	Superfund site at 10-acre landfill used for PCB-containing wastes; containment cap.	None	• Avoidance by maintaining I-69 location at existing SR 37 location. • No impact with Refined Preferred Alternative 8
	Illinois Central Spring Bloomington	Superfund site at discharge point of ILC Spring impacted by Lemon Lane Landfill; treatment of discharge.	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	• Commitment to prevent additional highway drainage from entering ILCS recharge/treatment area.
HM-8	Hanna Trucking 2520 Industrial Dr., Bloomington	Construction yard with four USTs that have been removed.	6, 7, 8, and Refined Preferred Alternative 8	• Refined Preferred Alternative 8 is outside of former contamination area and minimal excavation expected • Final design contractor to confirm same condition (no excavation outside of proposed Refined Preferred Alternative 8 construction limits and less than 10 feet below ground surface)
HM-9	Sturgis Auto Salvage, 2810 W. Hensonburg Rd., Bloomington	Towing, auto salvage, and repair facility.	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	• Phase II ESA due to history of automotive salvage operations • If encountered, excavate any contaminated materials
HM-10	Dotlich Crane Service Crescent Road & W 17th St., Bloomington	Crane, equipment, and maintenance building and yards with one diesel AST.	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	• Phase I ESA due to acquisition of the entire property; if recommended, a subsequent Phase II ESA • • If encountered, excavate any contaminated materials
HM-11	Bennett Stone Quarry SR 37 and SR 46, Bloomington	4-Acre former quarry pit used as a dump including PCB-containing waste. Water diversion, monitoring, and potential on-site treatment.	None	• Avoidance by maintaining existing SR 37, SR 46, and Arlington Rd. • No impact with Refined Preferred Alternative 8 • Commitment to prevent additional highway drainage from entering Bennett area along northwest SR 46/SR 37 (I-69) interchange
HM-12	INDOT SUBDIST 2965 N. Prow Rd., Bloomington	Repair and maintenance buildings and yard; new and used oil in drums and an AST.	None	• No impact with Refined Preferred Alternative 8 • Final design contractor to confirm same condition (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface)
HM-13	Hoosier Energy 7398 N. SR 37, Bloomington	Utility headquarters, electrical distribution center, transformer service and maintenance facility; 4 USTs, staged transformers, drums, and 2 ASTs (transformer oil), and equipment storage buildings and yards.	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	• Limited Phase II ESA for the proposed retaining wall or replacement of existing SR 37 drainage along western edge of the property • If encountered, excavate any contaminated materials

Table 4-1: Summary of Hazardous Waste Sites

Site ID	Site Name	Site Description	Affected Alternatives	Suggested Mitigation Measures
HM-14	Johnson Oil Bigfoot #071 7340 N. Wayport Rd., Bloomington	3 USTs "Permanently out of Service" (removed); four USTs "Currently In Use"; and a LUST with "No Further Action".	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	• Limited Phase II ESA for proposed property acquisition area along the UST locations along the western edge of the property and downgradient of the site to the south. • If encountered, excavate any contaminated materials
HM-15	Bloomington Auto Parts 7650 N. SR 37, Bloomington	IDEM report of "unknown material" affecting soil; concern for hazardous materials due to current and historical use as a long-term storage auto salvage yard.	None	• Limited Phase II ESA along existing SR 37 right-of-way due to history of violations and automotive salvage operations • If encountered, excavate any contaminated materials
---	---	Residence and farm ASTs and USTs. No specific sites identified.	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	Soil and groundwater impact assessment, and remove tanks in accordance with applicable state and federal laws and regulations.
---	---	Electrical Transformers (Multiple Locations).	4, 5, 6, 7, 8, and Refined Preferred Alternative 8	Coordinate with owner for proper handling/removal if affected.

4.1 C & H Stone Inc. (HM-1)

C & H Stone Inc. is located at 4000 South Rockport Road to the east of SR 37 ROW. The site is primarily to the north of Fullerton Pike and northwest of Rockport Road. The property has been a limestone fabrication and finishing facility for over 85 years. While Alternative 7 would not impact the site, this facility would be impacted on the southern boundary along West Fullerton Pike by Alternatives 4, 5, 6, 8, and Refined Preferred Alternative 8.

Due to the type of operations, field observations at the site, and the overlap with the Refined Preferred Alternative 8 right-of-way, a Phase I ESA is recommended prior to property acquisition by INDOT. The Phase I ESA may include a recommendation for a subsequent Phase II ESA. **Figure 4-1** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.2 Sam's Club #6437 (HM-2)

Sam's Club #6437 is located at 3205 West SR 45, adjacent to existing SR 37 right-of-way at the southwest quadrant of the existing SR 37 and SR 45/2nd Street interchange. The site would be impacted on the eastern edge of the property along existing SR 37 by all six Alternatives. Alternatives 4, 5, and the Refined Preferred Alternative 8 would have a local access drive that would have additional encroachment into the USTs and fuel island area of the property.

The relatively recent UST installation and lack of reported releases are positive factors; however, due to the close proximity of the active USTs to the local access road construction limits, and

right-of-way acquisition for Refined Preferred Alternative 8, a Phase II ESA consisting of soil and groundwater sampling is recommended. The Phase II will be limited to proposed property acquisition area along the UST locations. **Figure 4-2** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.3 Coca Cola Bottling Facility (HM-3)

The Coca Cola bottling facility is located at 1701 Liberty Drive, adjacent to western existing SR 37 ROW, just north of the SR 45/2nd Street interchange. Although the USTs were located southwest of the building in the western portion of the property (away from SR 37), based upon the higher elevation of the site, possible contamination could have migrated toward the lower elevation and buried sinkholes at the SR 37 and 2nd Street/SR 45 interchange. This facility would be impacted on the eastern edge of the property along existing SR 37 by Alternatives 4 and 5. Alternatives 6, 7, 8, and the Refined Preferred Alternative 8 do not directly impact the site. The Refined Preferred Alternative 8 includes additional travel lanes to the existing SR 37 median and relocates the existing SR 45 and SR 37 interchange exit ramp in the northwest quadrant further to the east and away from a buried sink and the Coca Cola site. This eastern shift would reduce the potential for encountering contaminated groundwater that may have followed surface drainage or karst conduits into the project area.

While the Refined Preferred Alternative 8 right-of-way avoids residual contamination and migration routes, during final design it should be confirmed that this is still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface). **Figure 4-3** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.4 Kmart Parking Lot (HM-4)

The Kmart #7402 parking lot (Site 19) is located at 3175 West 3rd Street, adjacent to the western edge of existing SR 37 ROW, just south of the SR 48/3rd Street interchange. The Section 5 Refined Preferred Alternative 8 for I-69 would require right-of-way from the existing Kmart property, along its northern border fronting 3rd Street. The concern for this site would be if any right-of-way should be needed from the former UST area for reconstruction/reconfiguration of the 3rd Street interchange. Although the one UST listed as "Permanently Out of Service" received a NFA from IDEM, there were limited samples collected, and it is located in close proximity to the build alternatives. This facility will be impacted on the eastern edge of the property along existing SR 37 by Alternatives 4 and 5. Alternatives 6, 7, 8 and the Refined Preferred Alternative 8 retains the use of the existing SR 48 and SR 37 bridge structure and interchange entrance ramp in the southwest quadrant, and includes additional travel lanes to the existing SR 37 median. These are expected to have minimal excavation in the area adjacent to the former UST location.

While the Refined Preferred Alternative 8 right-of-way avoids impacts from residual contamination and migration routes for the site, during final design it should confirmed that this is still the case for final construction limits, right-of-way, and excavation depth (no excavation

While the Refined Preferred Alternative 8 right-of-way avoids impacts from residual contamination and migration routes for the site, during final design it should confirmed that this is still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface). **Figure 4-4** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.5 Former Amoco Unit 10116 (HM-5)

The Former Amoco Unit 10116 is located at White Castle restaurant at 3100 West 3rd Street, adjacent to the northwest quadrant of the SR 37 and SR 48/3rd Street interchange. This facility would not be directly impacted by any of the six alternatives (and not require a Phase I ESA for property acquisition). Based upon IDEM VFC maps and IDEM LUST personnel, it appears the existing SR 37 right-of-way and drainage system in the northwest quadrant of the SR 37 and SR 48/3rd Street interchange may include a portion of the former USTs and elevated groundwater detection.

The Refined Preferred Alternative 8 includes additional exit ramps and drainage in the northwest quadrant SR 48 and SR 37 interchange. This facility will not be directly impacted by any of the six alternatives. While the Refined Preferred Alternative 8 right-of-way avoids impacts from residual contamination and migration routes for the site, during final design it should be confirmed that this is still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface). **Figure 4-5** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.6 Former Marathon Unit 2572 (HM-6)

The former Marathon Unit 2572 (Site 43) at 2850 West 3rd Street was located adjacent to the east of SR 37 ROW, just north of 3rd Street. Four USTs were reported "Permanently out of Service" at the former gas station (three 8,000 gallon gasoline tanks and one 500 gallon used oil tank). No sampling or assessment was reported. No additional documentation was provided. This facility would not be directly impacted by any of the six alternatives and is currently the site of the China House restaurant. The Refined Preferred Alternative 8 retains the use of the existing SR 48 and SR 37 interchange entrance ramp in the northeast quadrant, and adds bicycle pedestrian and roadway upgrades along existing SR 48/3rd Street. These are expected to have minimal excavation and not require right-of-way from the site.

While Refined Preferred Alternative 8 right-of-way avoids residual contamination and migration routes for the site, during final design it should be confirmed that this is still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of proposed Refined Preferred Alternative 8 construction limits and less than 10 feet below ground surface). **Figure 4-6** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.7 Lemon Lane Landfill (HM-7)

Lemon Lane Landfill is located southeast of the intersection of SR 37 and Vernal Pike. While none of the six alternatives would impact the landfill, the current alignment of SR 37 and all of the six alignments cross the ILCS recharge area approximately 1,600 feet south, to 1,200 feet north of the existing Vernal Pike intersection. I-69 would not result in any direct impacts to the Lemon Lane Landfill Superfund site itself; however, the site drains to the ILCS via conduits developed in the surrounding karst. Alternatives 4 and 5 widen away from the Site HM-7 Lemon Lane Landfill/ILCS recharge area and Alternatives 6, 7, 8, and Refined Preferred Alternative 8 maintain the use of the existing SR 37 right-of-way and adds additional lanes within the existing SR 37 median.

The USEPA administered cleanup of areas outside the landfill boundary was to a high occupancy/residential standard of two ppm PCBs (on average) to the north (toward Vernal Pike), east and west (toward SR 37) sides of the site. The cleanup along the southern side toward the CSX railroad was to 20 ppm PCBs for construction workers. Potential exposure to landfill-related soil contamination (in excess of industrial worker exposure standards of 10 ppm PCBs) is minimal based upon the upgradient location, higher elevation, and 1,000-foot separation from existing SR 37 and all of the alternatives, and the completion of on-site soil remedial actions along SR 37 to residential, industrial, and construction worker standards.

Parties involved in the ongoing treatment operations have requested that the Section 5 design and planning processes take into account the overall goal of reducing the volume of water entering the ILCS recharge area. Since the ILCS treatment system operations directly affect the local surface water and sediment quality, and consequently potential human and ecological receptors, roadway pavement runoff control and redistribution outside of the recharge area has been given a high priority. INDOT has made a mitigation commitment to prevent drainage from increasing above the existing SR 37 levels extending along the eastern side of SR 37 that is within the Site HM-7 Lane Landfill/ILCS recharge area to address USEPA and IDEM concerns regarding changes in existing groundwater flow. In addition, while blasting is not anticipated as part of the Section 5 construction in the vicinity, INDOT has expanded the drainage mitigation commitment to also prohibit blasting. Coordination with USEPA and IDEM has occurred throughout the Section 5 study and will continue through the design phase. **Figure 4-7** shows the site, its relationship to potential right-of-way of all six Alternatives, and the mitigation commitment area.

4.8 Hanna Trucking (aka United Rentals / HM-8)

The eastern border of the former Hanna Trucking site is located at 2520 Industrial Drive, adjacent to current SR 37 right-of-way. Although the site received an NFA letter; due to the amount removed material and the potential for contamination to migrate beyond the investigation area in a karst area, there is a potential for contamination to migrate beyond the investigation area. Alternatives 4 and 5 would not impact the site, however, the southeastern edge of the property along existing Industrial Park Road would be impacted by Alternatives 6, 7, 8, and

Refined Preferred Alternative 8. These are expected to have minimal excavation in the area adjacent to the former UST location.

While the Refined Preferred Alternative 8 right-of-way avoids residual contamination and migration routes for the site, during final design it should be confirmed that this still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of proposed Refined Preferred Alternative 8 construction limits and less than 10 feet below ground surface). **Figure 4-8** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.9 Sturgis Auto Salvage (HM-9)

Sturgis Auto Salvage is located at 2810 West Hensonburg Road, approximately 200 feet west of the existing SR 37 right-of-way and just north of the SR 37/Vernal Pike intersection. The Section 5 alternatives for I-69 would reconstruct, widen and straighten Hensonburg Road as it passes between the lots encompassing the Sturgis site, thereby resulting in impacts to portions of four lots currently fronting Hensonburg Road on the east and west sides. While the Sturgis site has no history of USTs or recorded history of spills or other hazardous materials responses, its long-term use as an automobile salvage (potential metals contamination) and repair facility indicates the possibility of small spills or leakages of petroleum products that, over time, could have resulted in contamination to soil on or in the vicinity of the site. This facility would be impacted with relocation of Industrial Park Road on the eastern portion of the property by Alternatives 6, 7, 8 while Alternatives 4 and 5 would impact through the center of the parcels. Refined Preferred Alternative 8 relocates the existing Industrial Park Road through the east side of the site.

Due to the type of operations, field observations at the site, and overlap with Refined Preferred Alternative 8 right-of-way, a Phase II ESA consisting of soil and groundwater testing is recommended. **Figure 4-9** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.10 Dotlich Crane Service (HM-10)

The Dotlich Crane Service property stores and maintains crane equipment, and is located northwest of the intersection of Crescent Road and West 17th Street. The facility stages cranes in an unpaved yard and provides standard operation and maintenance of equipment. An AST without secondary containment was noted at the site.

Due to the type of operations, field observations at the site, and the overlap with the Refined Preferred Alternative 8 right-of-way, a Phase I ESA is recommended prior to property acquisition by INDOT. The Phase I ESA may include a recommendation for a subsequent Phase II ESA. **Figure 4-10** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.11 Bennett Stone Quarry (HM-11)

The Section 5 Alternatives are over 1,400 feet to the east of the site boundary and are not hydrologically connected to SR 37 or the Section 5 corridor. The Refined Preferred Alternative 8 would not cross within the current right-of-way of the site, and thus, the Refined Preferred Alternative 8 design would avoid directing water through the site or to abandoned quarries that drain through the site. The SR 46 extension was constructed south of the site. During construction, a group of former quarries was filled and portions of the Stout Creek drainage system were altered. The site has exhibited elevated groundwater levels since construction of SR 46.

The remedy for the source control area has been implemented with confirmation sampling showing residual PCBs in soils below the site cleanup level of 25 ppm. Potential exposure to landfill related soil contamination (in excess of construction worker standards of 20 ppm) is minimal based upon the upgradient, higher elevation; the 1,000-foot separation from existing SR 37 and the alternatives; and, the completion of on-site soil remedial actions to site cleanup standards.

The remedy for groundwater has not been completely implemented, since low levels of PCBs continue to be detected at onsite springs. While the passive quarry drain has been constructed and is functioning well, PCBs continue to be released from on-site springs to Stout Creek, and further investigation into capturing and treating these releases is ongoing. The installation of a collection trench, on-site water treatment plant, and appropriate institutional controls are also under consideration as part of the completion of the groundwater remedy.

Parties involved in ongoing remedial design and mitigation measures at the site have requested that the I-69 Section 5 design and planning processes take into account the overall goal of redirecting runoff around the site. INDOT has made a mitigation commitment to prevent drainage from increasing above the existing SR 37 levels extending along the northwest quadrant of the SR 37/SR 46 interchange area to address USEPA and IDEM concerns regarding changes in existing drainage at the Site HM-11 - Bennett's Dump area. In addition, while blasting is not anticipated as part of the Section 5 construction in the vicinity, INDOT has expanded the drainage mitigation commitment to also prohibit blasting. **Figure 4-11** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.12 INDOT Subdistrict (HM-12)

The Section 5 Refined Preferred Alternative 8 is not expected to require additional right-of-way from the INDOT Subdistrict facility. The facility does use of motor oil and hydraulic fluids; however, the materials are well maintained, with appropriate containers, secondary containment and drainage systems. While historic petroleum storage quantities have been minor, it is in close proximity of the facility to the Refined Preferred Alternative 8. This facility would not be directly impacted by any of the six alternatives. The Refined Preferred Alternative 8 retains the

use of the existing SR 37 and includes additional travel lanes to the existing SR 37 median. These are expected to have minimal excavation in the area adjacent to the site.

While the Refined Preferred Alternative 8 right-of-way avoids residual contamination and migration routes for the site, during final design it should be confirmed that this still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of existing SR 37 right-of-way and less than 10 feet below ground surface). **Figure 4-12** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.13 Hoosier Energy (HM-13)

The Hoosier Energy at 7398 North SR 37 is located adjacent to the east of the existing SR 37 right-of-way (Figure 4.5-1). During closure of 5 USTs in 1993, low levels of soil contamination waste were reported. The site was considered discontinued/low priority by IDEM in May 1995, based upon low residual but inaccessible soil contamination. These USTs were replaced with four USTs currently in operation that include a 10,000-gallon gasoline tank; a 4,000-gallon diesel tank, a 550-gallon waste oil tank, and 550-gallon diesel UST that supplies fuels for an emergency backup generator. No comments were noted in the February 2013 IDEM inspection. Two 2,500-gallon ASTs, 55-gallon drums, and over 100 transformers containing transformer oil (on secondary containment) are also located at the facility. The substation located on Norm Anderson Road would not be impacted by any of the six Alternatives. The transformer/and maintenance facility would be impacted by Alternatives 4 and 5 along the eastern portion of the property. The utility headquarters/electrical distribution center would be impacted along the western edge of the property along existing SR 37 by all six of the alternatives. While these will include excavation, except for the downgradient 550 gallon backup generator UST, all of the remaining contaminate sources are separated from the project area by a minor valley containing a small stream.

Due to the site's regulatory listing and overlap with Refined Preferred Alternative 8 right-of-way, a limited Phase II ESA for the proposed retaining wall or replacement of existing SR 37 drainage along western edge of the property is recommended prior to property acquisition by INDOT. **Figure 4-13** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.14 Johnson Oil Bigfoot #071 (aka Circle K-BP / HM-14)

This facility will be impacted on the western edge of the property along existing SR 37 by all six of the alternatives and through the parcel by Alternatives 4 and 5. The facility is upgradient of the local service road and exit ramps in the southeast quadrant of the proposed I-69 and Sample Road interchange included in the Refined Preferred Alternative 8. While the previous LUST incident received an NFA letter from IDEM, and there is no indication that any of the current tanks are leaking or that there are any other hazardous materials being stored on site, care must be taken to locate and properly remove all buried tanks, if located within final design construction limits.

Based the proximity of the Refined Preferred Alternative 8 local access road and exit ramp construction limits and right-of-way acquisition to the fuel dispensing and UST locations, a Phase II ESA consisting of soil and groundwater sampling is recommended. The Phase II will be limited to the proposed property acquisition area along the UST locations along the western edge of the property and downgradient of the site to the south. **Figure 4-14** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.15 Bloomington Auto Parts (HM-15)

The Section 5 Alternatives for I-69 uses the current northbound lane of SR 37 as a frontage road, with both mainline lanes of I-69 shifted to the west, thus avoiding direct impacts to the majority of the Bloomington Auto Parts site. The possibility of impacts exists only on a small portion of the southwest corner of the site. However, this corresponds to an area that has been filled and graded. This facility will not be impacted by any of the six alternatives.

Based upon the close proximity of potential contaminate sources to the Refined Preferred Alternative 8 construction limits, observed operations, and reported violations at the site, a limited Phase II ESA along existing SR 37 right-of-way consisting of soil and groundwater testing is recommended. **Figure 4-15** shows the site and its relationship to potential right-of-way of all six Alternatives.

4.16 Potential Unknown Hazardous Materials Sites

Caution - Numerous rural residences and farms were identified within the Section 5 corridor that may have the potential for ASTs and USTs to be present. These tanks are typically used for the on-site storage of chemicals associated with pesticides and herbicides and fuel for equipment. While no specific sites were identified, if any ASTs and/or USTs are encountered within Refined Preferred Alternative 8, then they will be removed in accordance with applicable state and federal laws and regulations. As part of the removal of the USTs, an impact assessment consisting of soil and/or groundwater testing will be performed.

Caution - During the field inspection, utility owned pole-mounted, slab-mounted, and sub-station electrical transformers were observed along public rights-of-way. While visible indicators of oil leakage were not specifically noted, due to the number, variety of age/condition, and placement of these transformers, all six alternatives (including the Refined Preferred Alternative 8) may impact some of these transformers. Coordination will occur with the utility and private owners of electrical transformers before and during construction for proper handling and removal of any transformers or pipes affected by Refined Preferred Alternative 8.

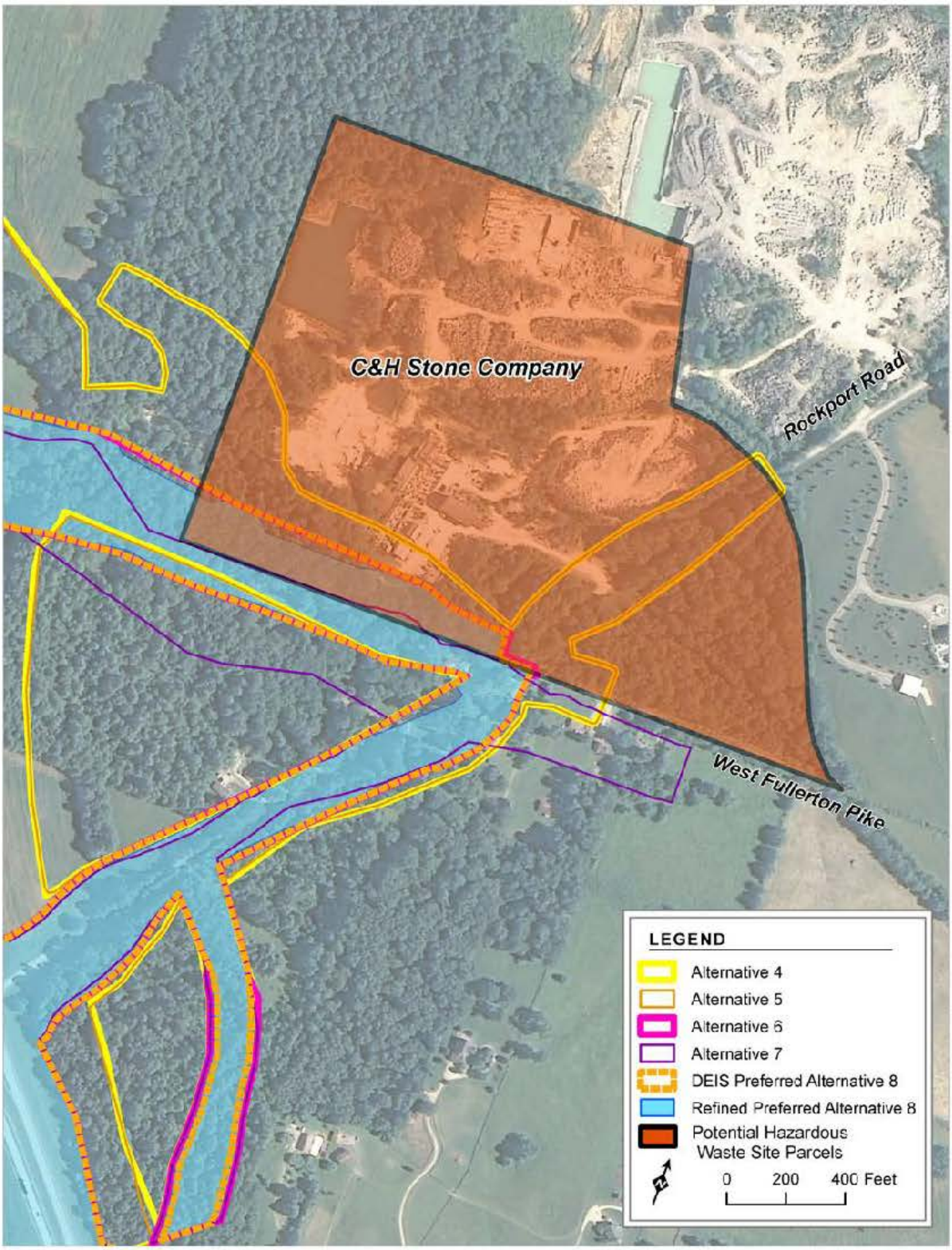

Figure 4-1: C & H Stone Inc. (HM-1), 4000 S Rockport, Bloomington

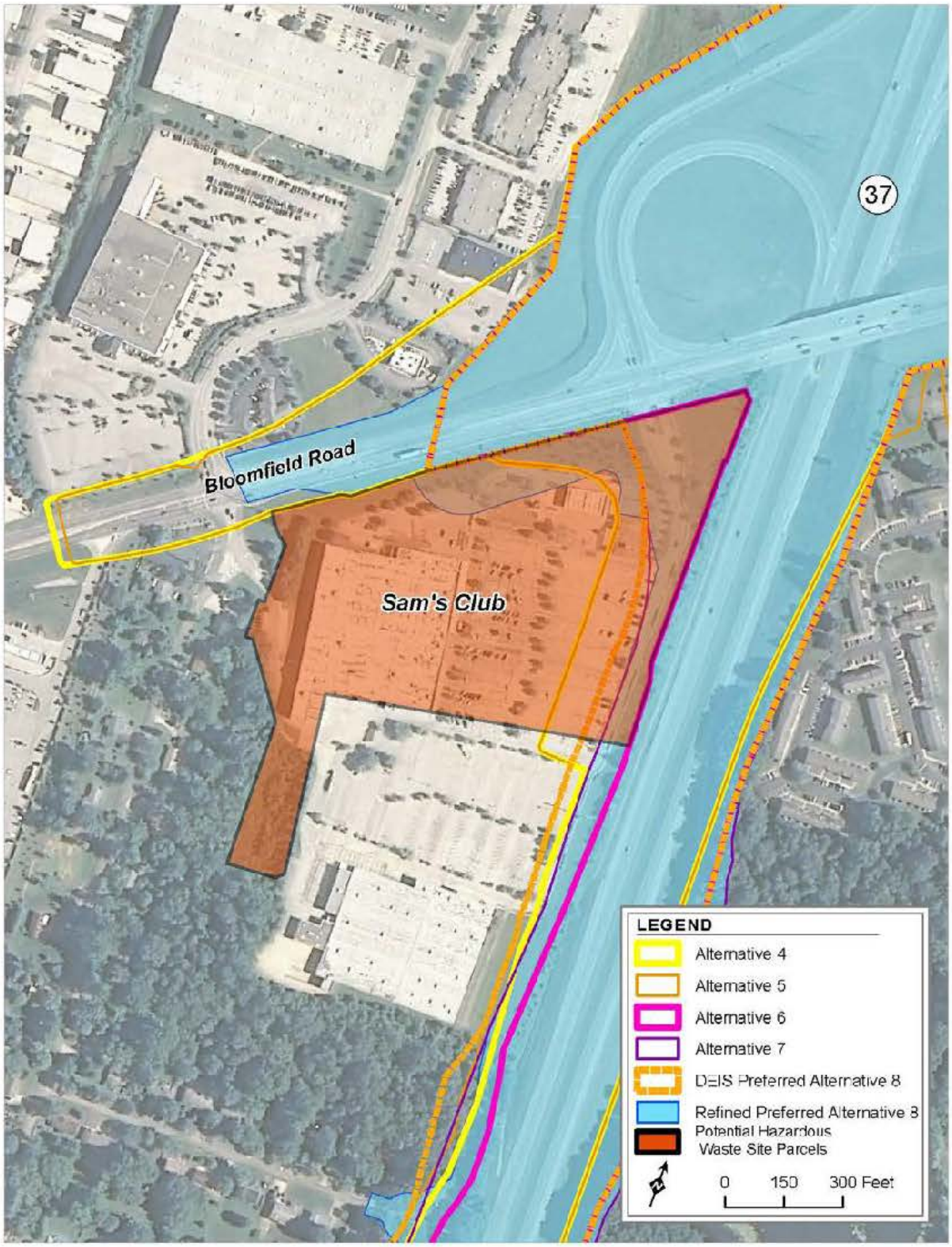

Figure 4-2 Sam's Club #6437 (HM-2), 3205 W. SR 45, Bloomington

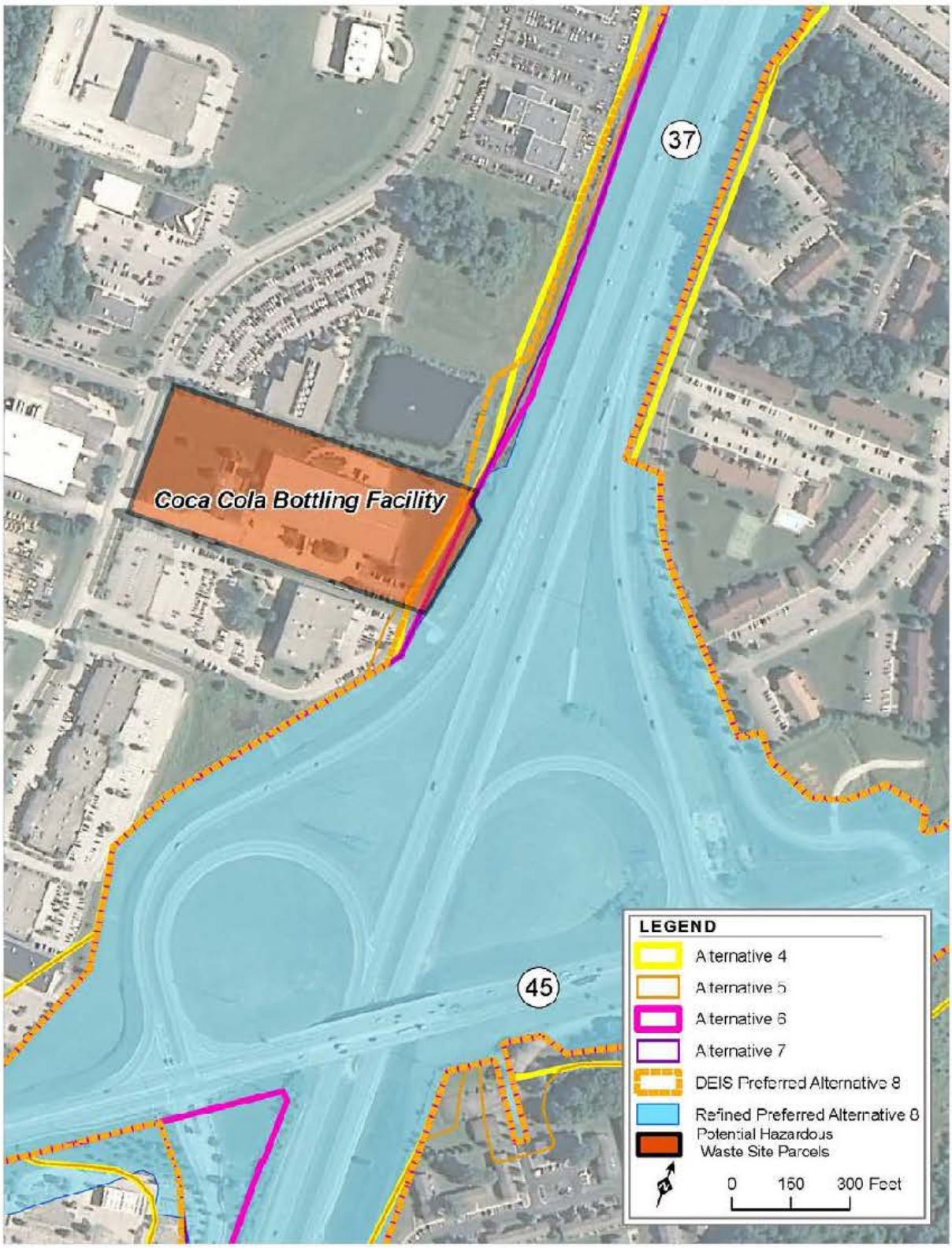

Figure 4-3: Coca Cola Bottling Facility (HM-3), 1701 Liberty Drive, Bloomington

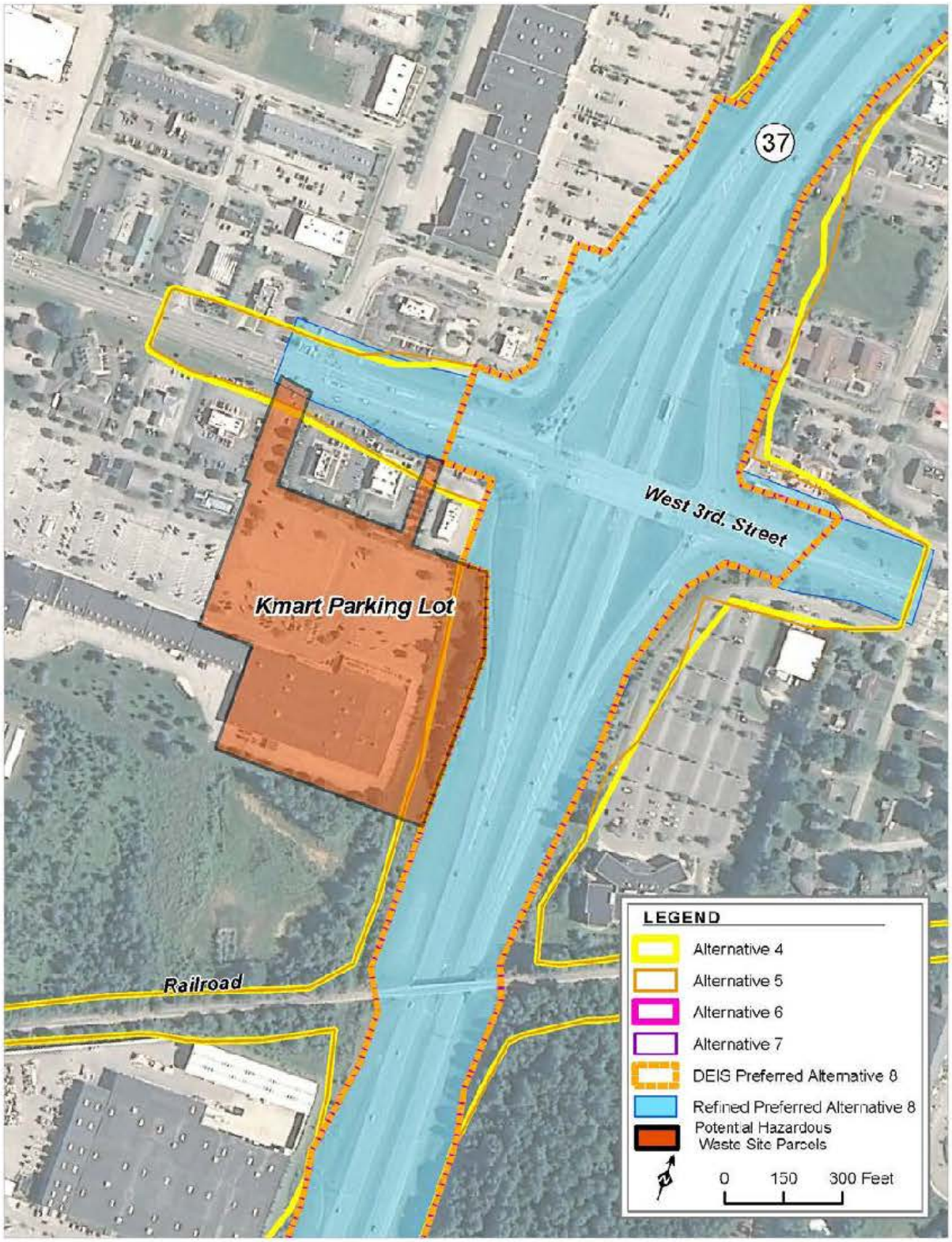

Figure 4-4: Kmart #7402 parking lot (HM-4), 3175 W. 3rd Street, Bloomington

Figure 4-5 Former Amoco Unit 10116 (HM-5), 3100 West 3rd Street, Bloomington

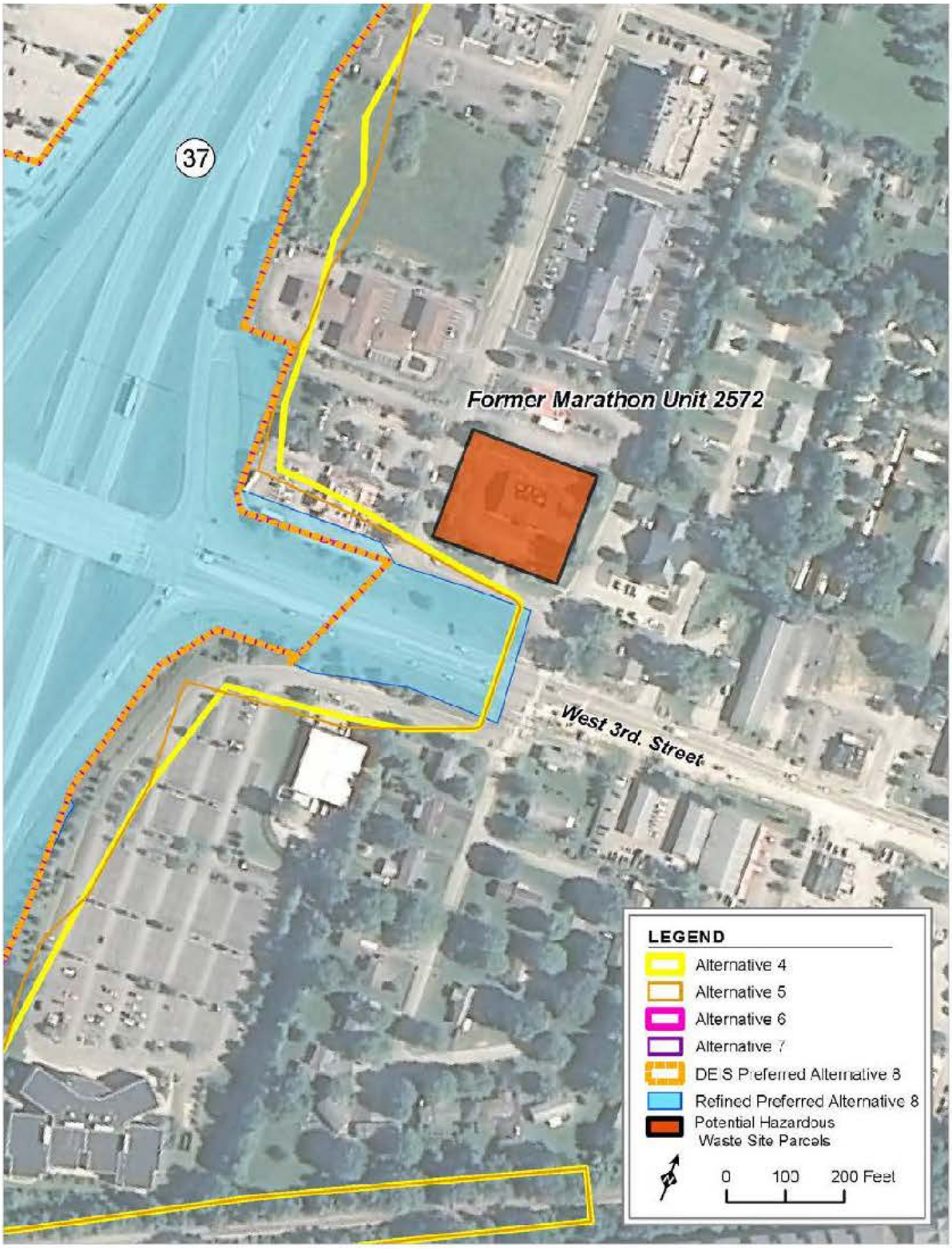

Figure 4-6: Former Marathon Unit 2572 (HM-6), 2850 W. 3rd Street, Bloomington

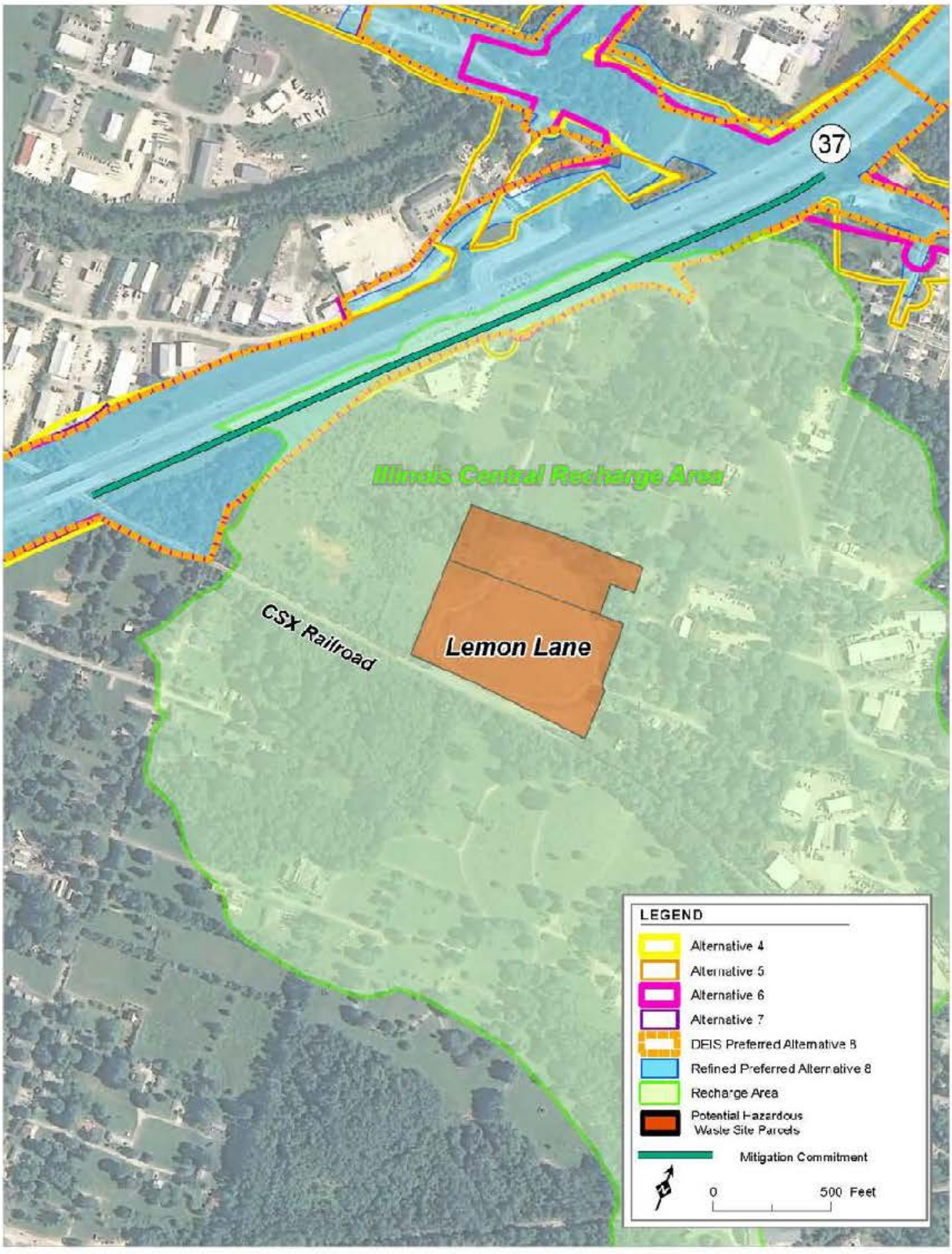

Figure 4-7: Lemon Land Landfill Superfund Site Location (HM-2), Showing ILCS Recharge Area

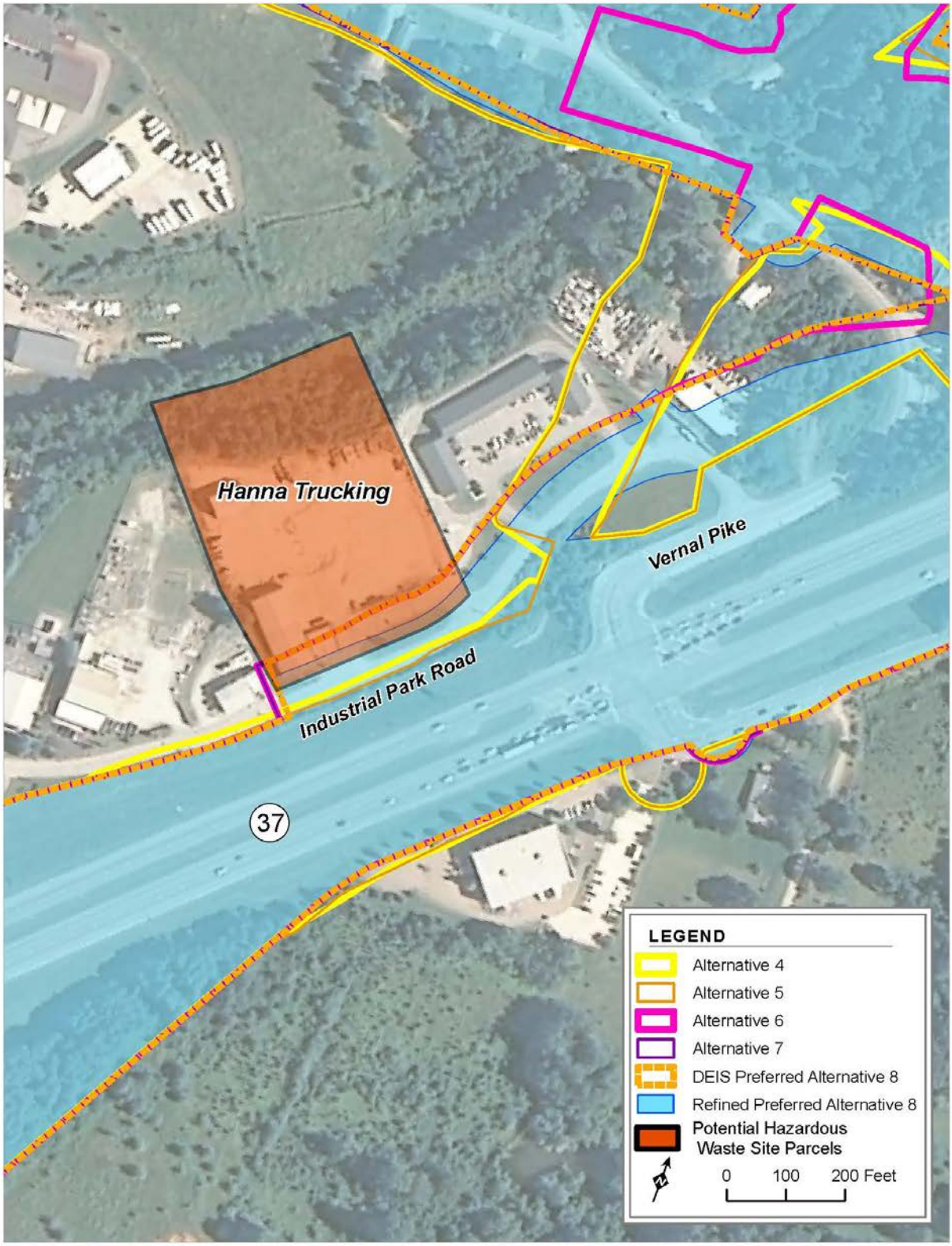

Figure 4-8 Hanna Trucking (HM-8), 2520 Industrial Drive, Bloomington

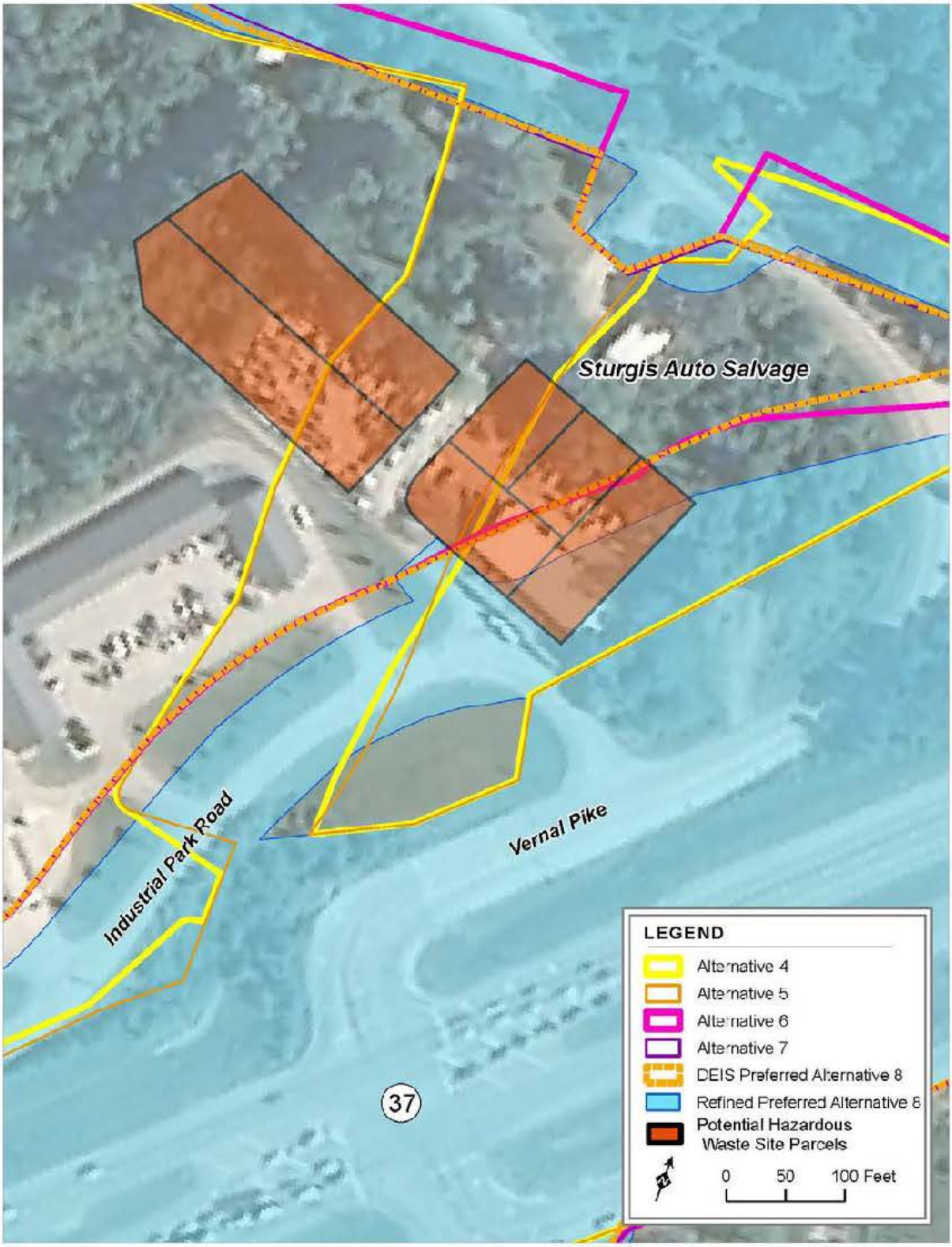

Figure 4-9: Sturgis Auto Salvage lot (HM-9), 2810 W Hensonburg Road, Bloomington

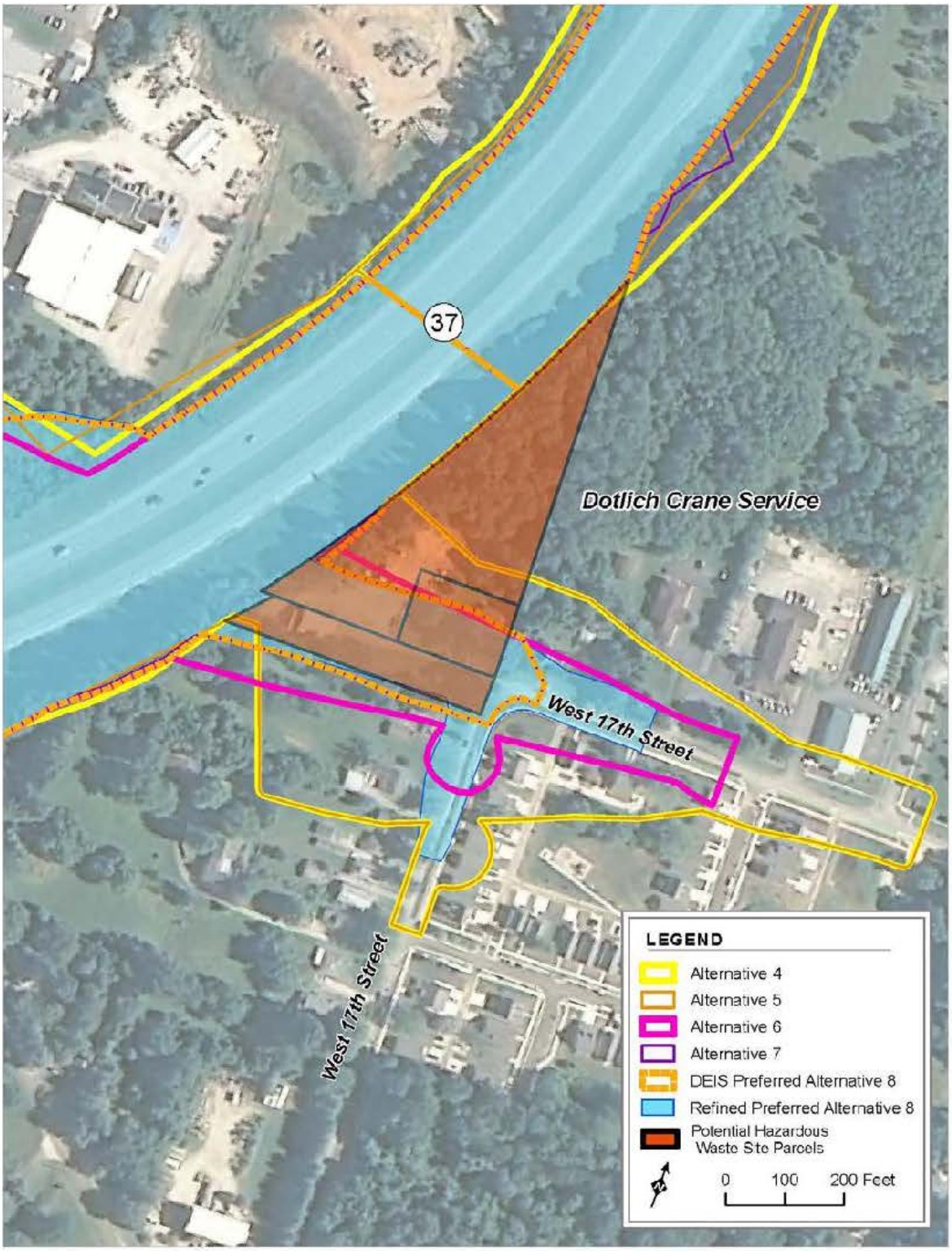

Figure 4-10: Dotlich Crane Service (HM-10), intersection of Crescent Road and West 17th Street, Bloomington

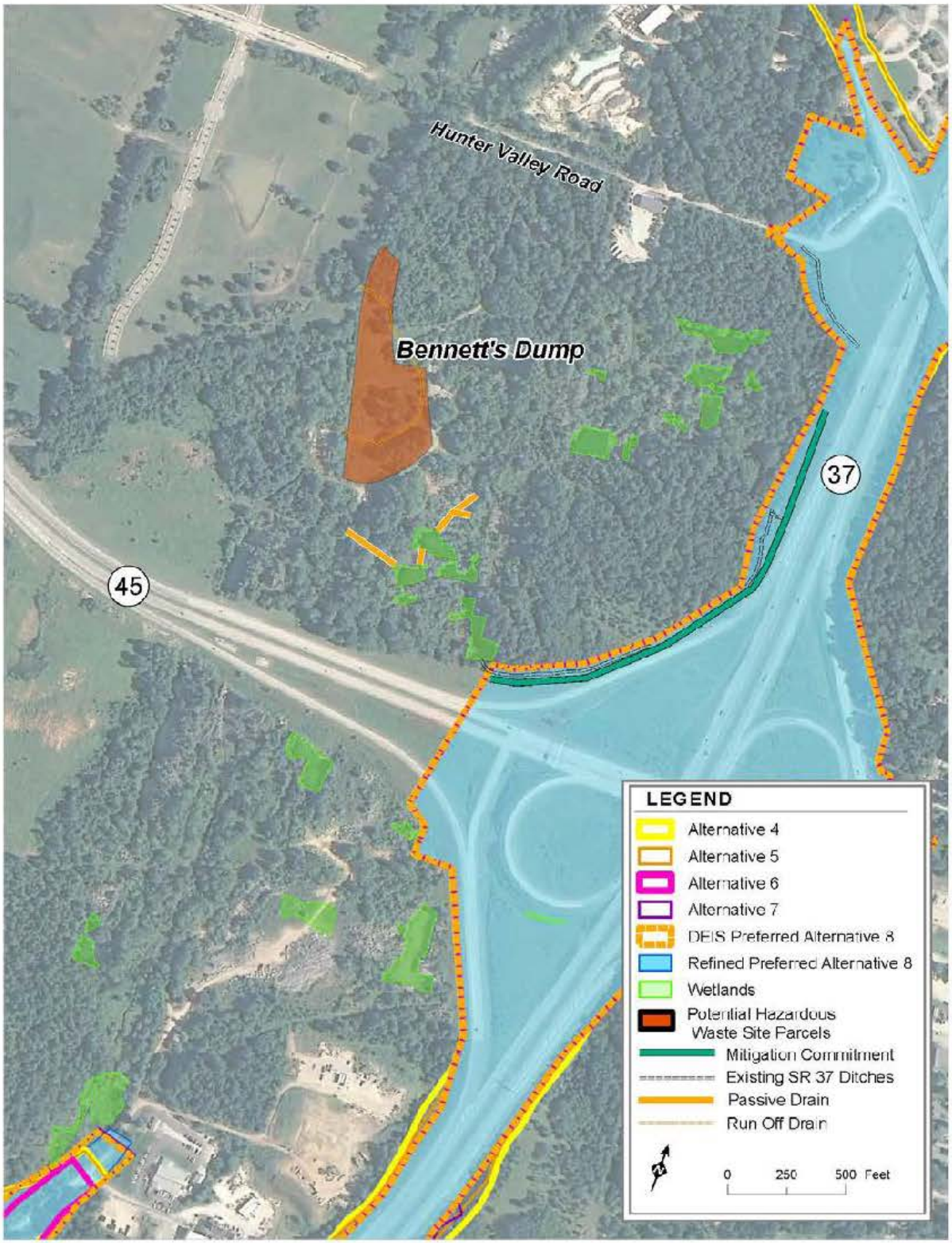

Figure 4-11: Bennett Stone Quarry Superfund Site (HM-11), intersection of SR 46 and SR 37, Bloomington

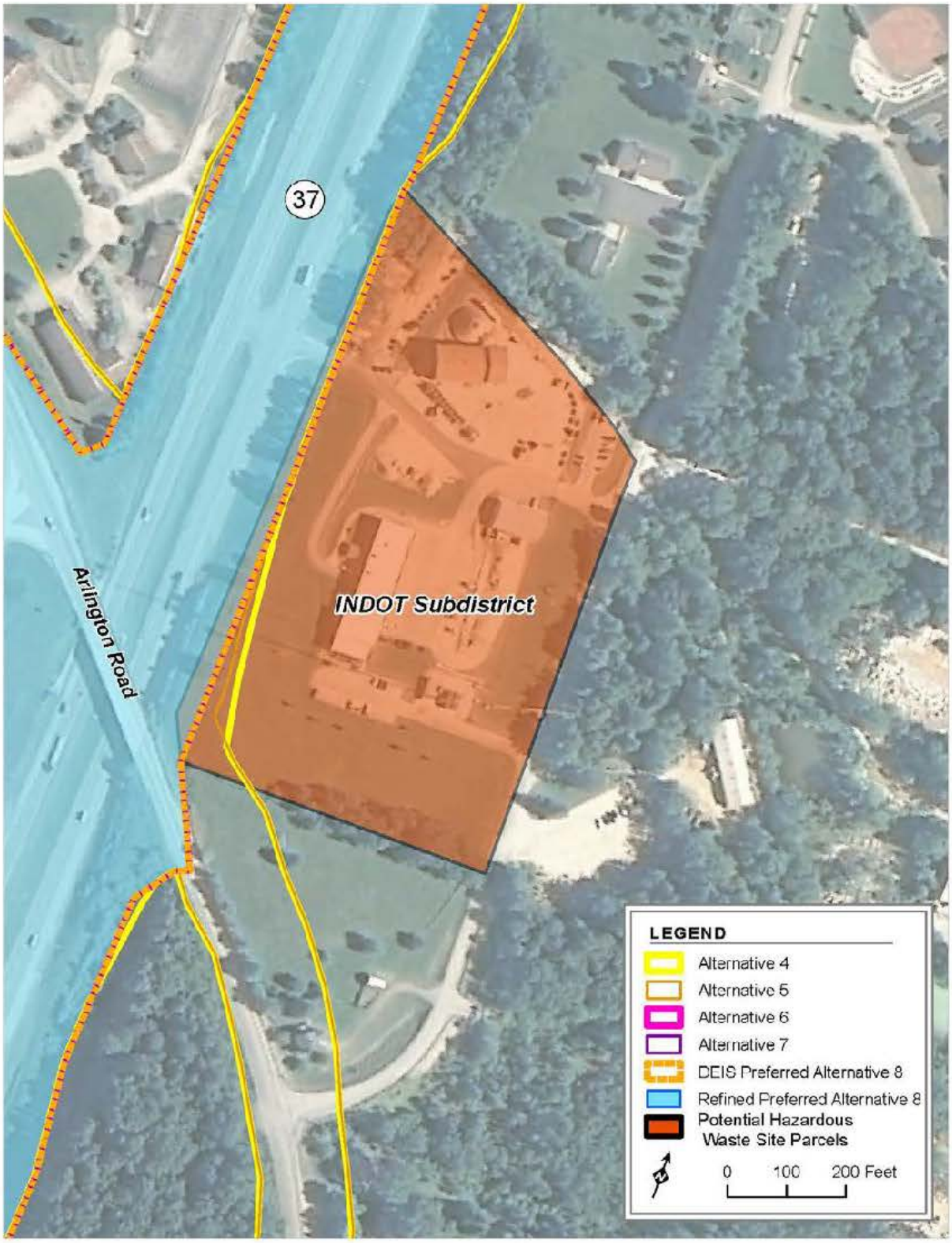

Figure 4-12: INDOT Subdistrict (HM-12), 2965 Prow Road, Bloomington

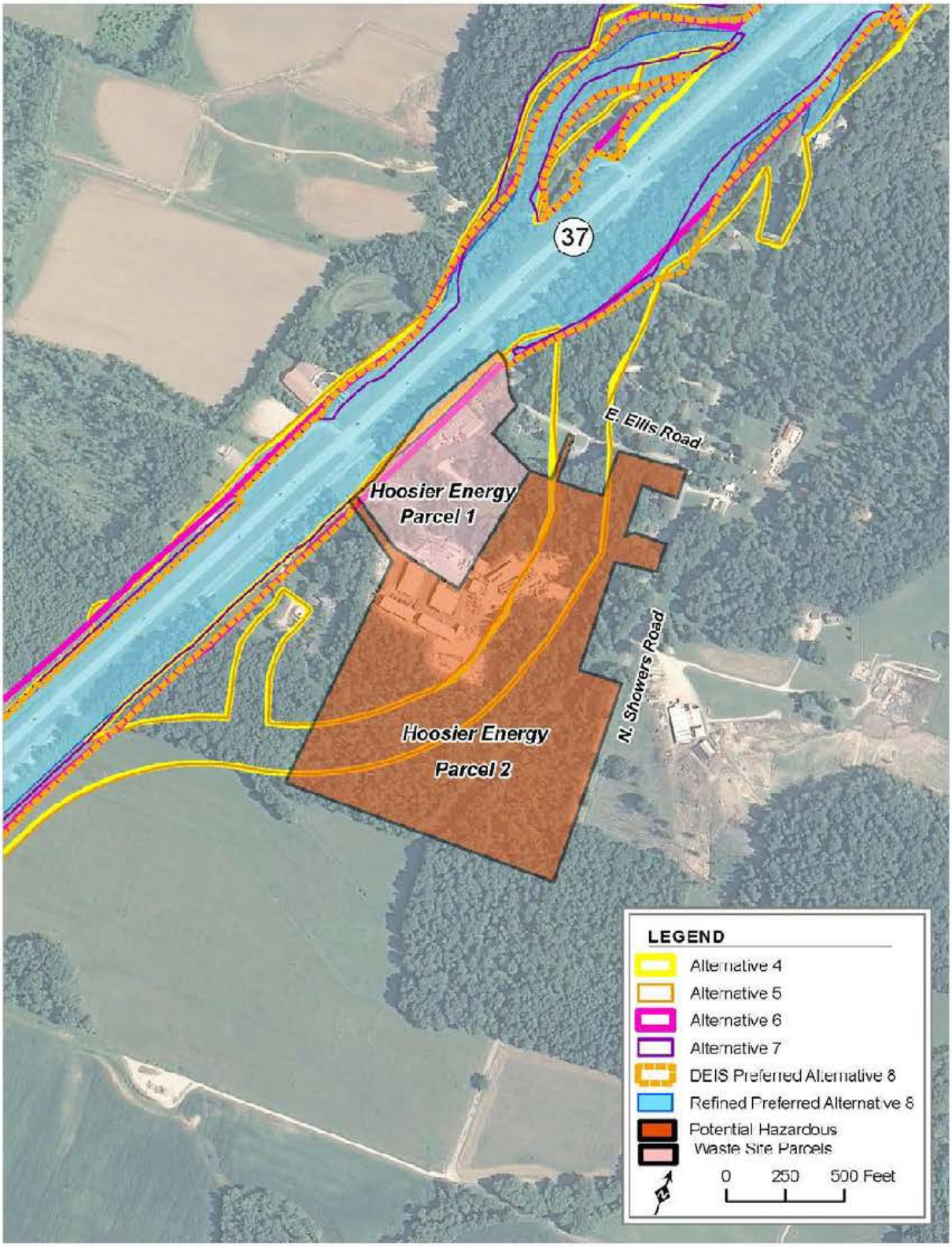

Figure 4-13 Hoosier Energy (HM-13), 7398 N. SR 37, Bloomington

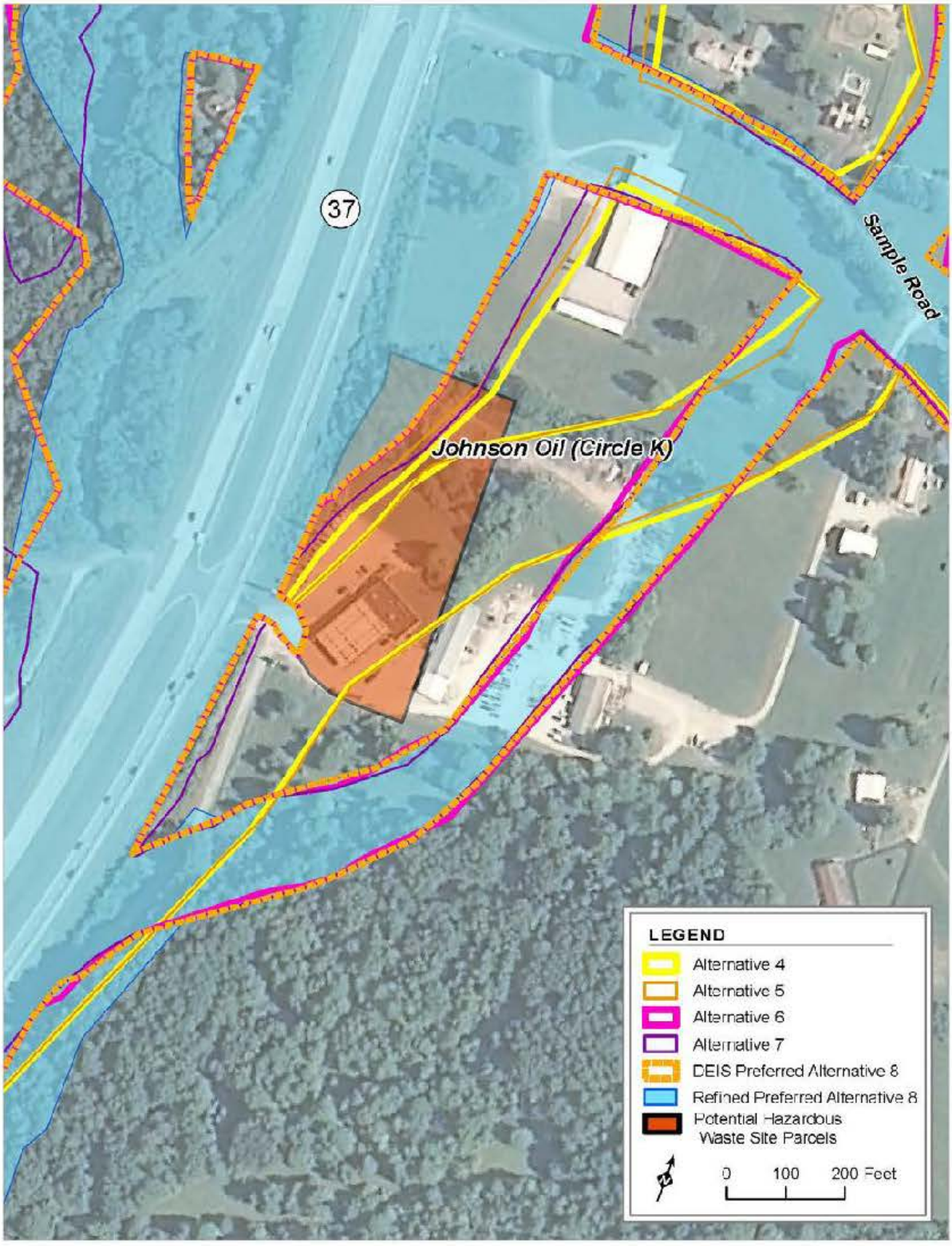

Figure 4-14: Johnson Oil Bigfoot (aka Circle K-BP; HM-14), 7340 N. Wayport Road, Bloomington

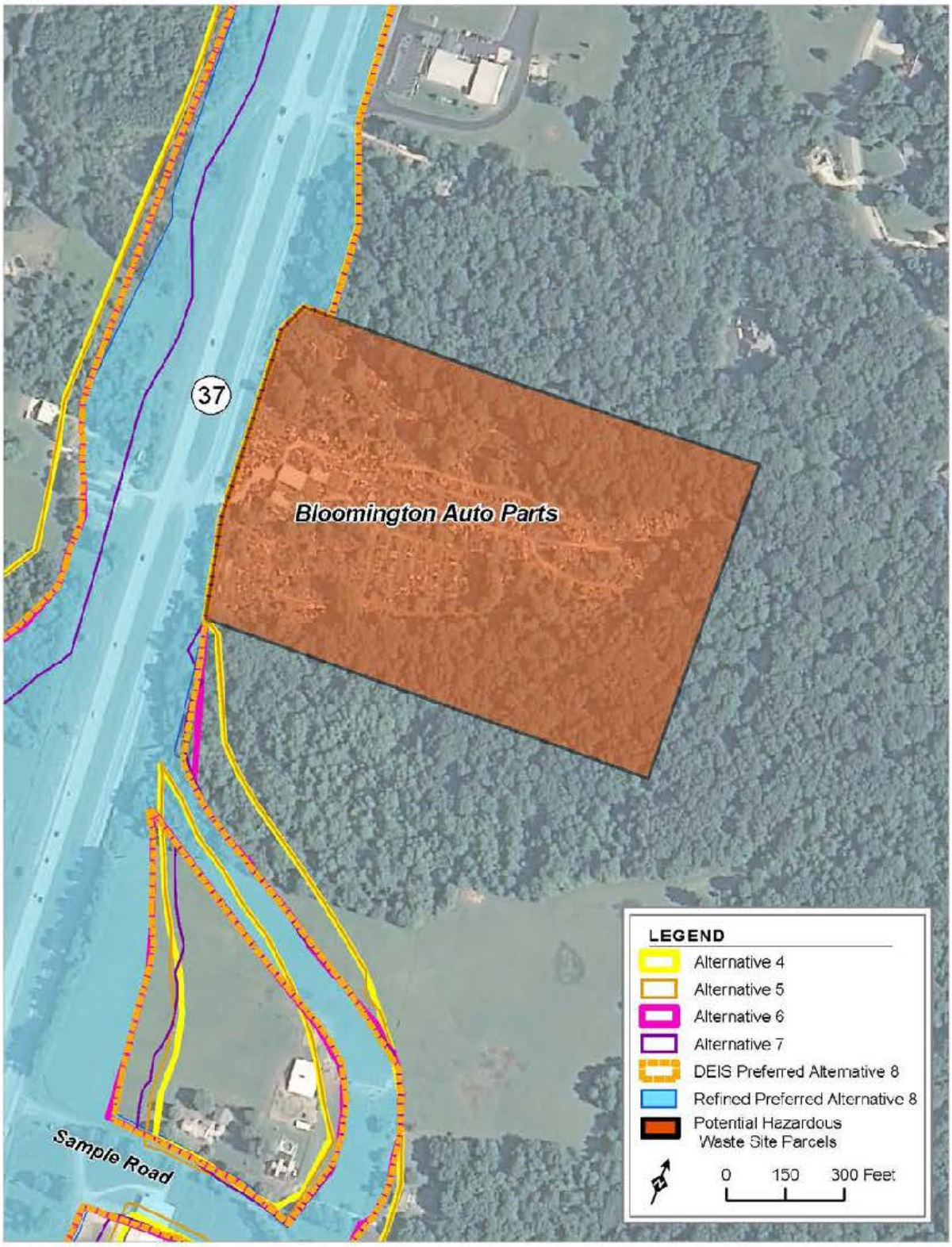

Figure 4-15: Bloomington Auto Parts (HM-15), 7650 N. SR 37, Bloomington

5 Mitigation

Phase I ESAs are recommended for two HM sites due to the Refined Preferred Alternative 8 anticipated right-of-way property acquisitions. While the Refined Preferred Alternative 8 right-of-way avoids residual contamination and migration routes for six HM sites, during final design it would be confirmed that this is still the case for final construction limits, right-of-way, and excavation depth (no excavation outside of existing SR 37 right-of-way or Refined Preferred Alternative construction limits and less than 10 feet below ground surface). A Phase II ESA consisting of soil and/or groundwater testing would be conducted for five properties located within Refined Preferred Alternative 8 that were LUST or UST sites. The Phase I and II ESAs will be performed prior to or as part of the right-of-way acquisition process.

While no USTs were reported within the Refined Preferred Alternative 8, in the event that an unknown UST is encountered, it will be removed in accordance with 329 IAC 9, which includes an assessment of soil and groundwater. The mitigation measures listed below (from south to north) have been developed for the potential hazardous waste sites impacted by one or more of the six Section 5 alternatives:

- **Final Design Confirmation** – While the Refined Preferred Alternative 8 right-of-way avoids residual contamination and migration routes for six HM sites, during final design it would be confirmed that this is still the case for final construction limits, right-of-way, and excavation depths at these six sites, which include: Site HM-3 Coca Cola Bottling, Site HM-4 Kmart Parking Lot, Site HM-5 Former Amoco Unit 10116, Site HM-6 Former Marathon Unit 2572, Site HM-8 Hanna Trucking, and Site HM-12 INDOT Subdistrict. Confirmation will consist, at a minimum, of checking that the final design construction limits are either within existing SR 37 right-of-way and/or the Refined Preferred Alternative construction limits, and that excavation depths are less than 10 feet below ground surface. In the event that avoidance of potential residual contamination or a migration route cannot be confirmed during final design, a Phase II Environmental Site Assessment (ESA) may be recommended.

- **Phase I ESA** – Prior to property acquisition by INDOT, a Phase I ESA is recommended for sites where a portion of an HM site is part of the Refined Preferred Alternative 8 right-of-way and additional information beyond that evaluated as part of the Section 5 FEIS is recommended. These include two HM sites: Site HM-1 C&H Stone and Site HM-10 Dotlich Crane Service. The Phase I ESA may include a recommendation for a subsequent Phase II ESA.

- **Phase II ESA** – Based upon the potential to encounter residual soil and/or groundwater contamination, Phase II ESAs are recommended at five HM sites as part of the Refined Preferred Alternative 8: HM-2 Sam's Club (limited Phase II ESA), Site HM-5 Former Amoco Unit 10116, Site HM-9 Sturgis Auto Salvage, Site HM-13 Hoosier Energy (limited Phase II ESA), Site HM-14 - Johnson Oil Bigfoot (aka Circle K/BP; limited Phase II ESA), and Site HM-15 - Bloomington Auto Parts (limited Phase II ESA) and will consist of soil and/or groundwater testing. The Phase II ESAs will determine if the

properties located within Refined Preferred Alternative 8 right-of-way limits, or adjacent sites with an elevated potential for contamination entering the right-of-way, have been impacted. The Phase II ESAs will be performed prior to, or as part of, right-of-way acquisition. While a Phase I ESA is not a requirement for conducting a Phase II ESA, the results of a Phase I ESA for property acquisition would be used to modify the recommendation and/or extent of a Phase II ESA for a given property.

- **Mitigation Commitment** – Alternatives 4 and 5 widen away from Site HM-7 Lemon Lane Landfill/ILCS recharge area, and Alternatives 6, 7, 8, and Refined Preferred Alternative 8 maintain use of the existing SR 37 right-of-way and add additional lanes within the existing SR 37 median area. INDOT has made a mitigation commitment to prevent I-69 drainage from increasing above the existing SR 37 levels extending along the eastern side of SR 37 that is within the Lemon Lane Landfill/ILCS recharge area to address USEPA and IDEM concerns regarding changes in existing groundwater flow. Blasting is not anticipated and will not be allowed adjacent to the site to prevent damage to the monitoring system (see **Figure 5.16-8**). Coordination with USEPA and IDEM has occurred throughout the Section 5 study and will continue through the design phase. Design plans for construction in this area will be provided to USEPA and IDEM for review with a requested two-week turnaround time for comments.

- **Mitigation Commitment** – Alternatives 4 and 5 widen to the outside of existing SR 37 lanes while Alternatives 6, 7, 8, and Refined Preferred Alternative 8 maintain use of the existing SR 37 right-of-way and add additional lanes within the existing SR 37 median area upgradient of the Site HM-11 Bennett's Dump area. INDOT has made a mitigation commitment to prevent I-69 drainage from increasing above the existing SR 37 levels extending along the northwest quadrant of the SR 37/SR 46 interchange to address USEPA and IDEM concerns regarding changes in existing drainage at Site HM-11 - Bennett's Dump area. Blasting is not anticipated and will not be allowed adjacent to the site to prevent damage to the monitoring system (see **Figure 5.16-12**). Coordination with USEPA and IDEM has occurred throughout the Section 5 study and will continue through the design phase.

- **Caution** – Rural residences and farms were identified within the Section 5 corridor with the potential for ASTs and USTs to be present. These tanks are typically used for heating, the on-site storage of chemicals associated with pesticides and herbicides, and fuel for equipment. While no specific sites were identified, if any ASTs and/or USTs are encountered within Refined Preferred Alternative 8, then they will be removed in accordance with applicable state and federal laws and regulations. As part of the removal of the USTs, an impact assessment consisting of soil and/or groundwater testing will be performed.

- **Caution** – Coordination will occur with the utility and private owners of electrical transformers before and during construction for proper handling and removal of any transformers or pipes affected by Refined Preferred Alternative 8.

6 References

IDEM 2012: Numerous files reviewed posted upon the Indiana Department of Environmental Management Virtual File Cabinet (http://www.in.gov/idem/4101.htm) in May and October 2012.

Arroyo, K.J. 2001. A shallow temperature profile, fracture trace and very low frequency investigation to determine locations of lateral inflow beneath a Superfund site in Bloomington, Indiana. Unpublished Master's thesis, Indiana University. 144 p.

Earth Tech. Memo: Karst Inventory of Tapp Road Property, prepared for Smith Neubecker and Associates, 2002.

Fitch, J.R. 1994. A karst groundwater study to delineate the Quarry Spring basin groundwaters near the Lemon Lane Landfill, west-central Bloomington, Indiana. Unpublished Master's thesis, Indiana University. 154 p.

Freeze, R.A. and J.A. Cherry. 1979. *Groundwater*. Prentice-Hall, Inc. 604 p.

Gates, G. R. 1962. Geologic considerations in urban planning for Bloomington, Indiana: Indiana Geological Survey Report of Progress 25.

Harke and Gray. 1998. Geology for Environmental Planning in Monroe County; Published by the Indiana Geologic Survey, 1989, reprinted in 1998.

Hasenmueller, Walter A. "Bedrock Geologic Map of Monroe County, Indiana". Indiana Geological Survey, 2008.

Indiana Department of Natural Resources, Division of Soil Conservation. 1992. Indiana Handbook for Erosion Control in Developing Areas: Guidelines for Protecting Water Quality through the Control of Sedimentation on Construction Sites.

U.S. Geological Survey. 1980b. Clear Creek Quadrangle, Indiana-Monroe County: 7.5-minute series (topographic).

U.S.EPA. 2010: Second Five-Year Review Report for the Lemon Lane Landfill Monroe County, Indiana, May 2010, prepared by the United States Environmental Protection Agency Region V.

U.S.EPA. 2012: Third Five-Year Review Report for the Lemon Lane Landfill Monroe County, Indiana, August 2012, prepared by the United States Environmental Protection Agency Region V.